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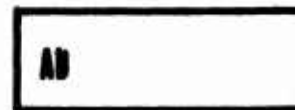
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USAAVLABS TECHNICAL REPORT 70-51

FLIGHT LOADS INVESTIGATION OF AH-1G HELICOPTERS OPERATING IN SOUTHEAST ASIA

By

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September 1970

U. S. ARMY AVIATION MATERIEL LABORATORIES
FORT EUSTIS, VIRGINIA

CONTRACT DAAJ02-68-C-0076

TECHNOLOGY INCORPORATED

DAYTON, OHIO

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This report has been reviewed by the U. S. Army Aviation Materiel Laboratories and is considered to be technically sound. The data presented were obtained from oscillograph recorders installed on three U. S. Army AH-1G helicopters performing operational missions in Southeast Asia. These data indicate the missions flown and the accelerations associated with the combatant deployment of this aircraft. The report is published for the exchange of information and the stimulation of ideas.

Task IF162204A14607
Contract DAAJ02-68-C-0076
USAAVLABS Technical Report 70-51
September 1970

**FLIGHT LOADS INVESTIGATION OF AH-1G HELICOPTERS
OPERATING IN SOUTHEAST ASIA**

Final Report

By

**F. Joseph Giessler
John F. Nash
Ronald I. Rockafellow**

Prepared by

**Technology Incorporated
Dayton, Ohio**

for

**U. S. ARMY AVIATION MATERIEL LABORATORIES
FORT EUSTIS, VIRGINIA**

This document is subject to special export controls, and each transmittal to foreign governments or foreign nationals may be made only with prior approval of U. S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia 23604.

ABSTRACT

From a structural flight loads program on three AH-1G helicopters, 408.2 hours of valid multichannel flight data were recorded as the helicopters operated from bases in Southeast Asia. Data were processed and analyzed according to four distinct flight phases, termed mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. Data are presented in the form of time and occurrence tables, histograms, and exceedance curves. These data indicate the time spent in the mission segments and parameter ranges; the number of peak parameter values occurring in the ranges of the given parameter, during each of the mission segments, and in the ranges of one or more related parameters; and the time to reach or exceed given maneuver and gust normal load factors. The data are presented in two samples of 201.7 hours and 206.5 hours. These samples, identified as Sample I and Sample II respectively, were obtained consecutively. Sample I was recorded between August 1968 and April 1969, and Sample II was recorded between April 1969 and November 1969. This separate presentation is made to permit an evaluation of the validity of the 200-hour sample as an adequate data base. The differences between the two samples were minor, and the two samples were observed to be similar in their distributions of flight data.

FOREWORD

Technology Incorporated, Dayton, Ohio, prepared this report to cover its efforts on a flight loads data program to collect, process, and analyze a 400-hour sample of valid flight data obtained from three AH-1G helicopters operating in Southeast Asia. This program was sponsored by the U.S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, under Contract DAAJ02-68-C-0076, Task IF162204A14607. The project monitor for the Army was Mr. William T. Alexander.

The prime Technology Incorporated personnel engaged in this program were as follows: Mr. Henry C. Pender, project engineer, who directed the installation and operation of the data recording systems; Messrs. John F. Nash and Ronald I. Rockafellow, who directed the data processing; Mr. William E. Morrin, who directed the computer programming for the data processing; and Mr. F. Joseph Giessler, who assisted in the data presentation and compilation.

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LIST OF SYMBOLS

<u>Symbol</u>	<u>Definition</u>	<u>Computer Equivalent</u>
C_T	thrust coefficient	CT
C_T/σ	thrust coefficient ratio	CT/S
h_d	density altitude, feet	
n_x	longitudinal load factor	NX
n_y	lateral load factor	NY
n_z	normal load factor	NZ
OAT	outside air temperature, °F	
P_a	atmospheric static pressure, inches of mercury	
R	rotor radius, feet	
V	airspeed, feet per second or knots	
W	gross weight, pounds	
μ	rotor tip speed ratio	MU
π	ratio of circumference to diameter of circle	
ρ	local air density, pounds per cubic foot	
σ	rotor solidity	S
Ω	rotor angular velocity, radians per second	

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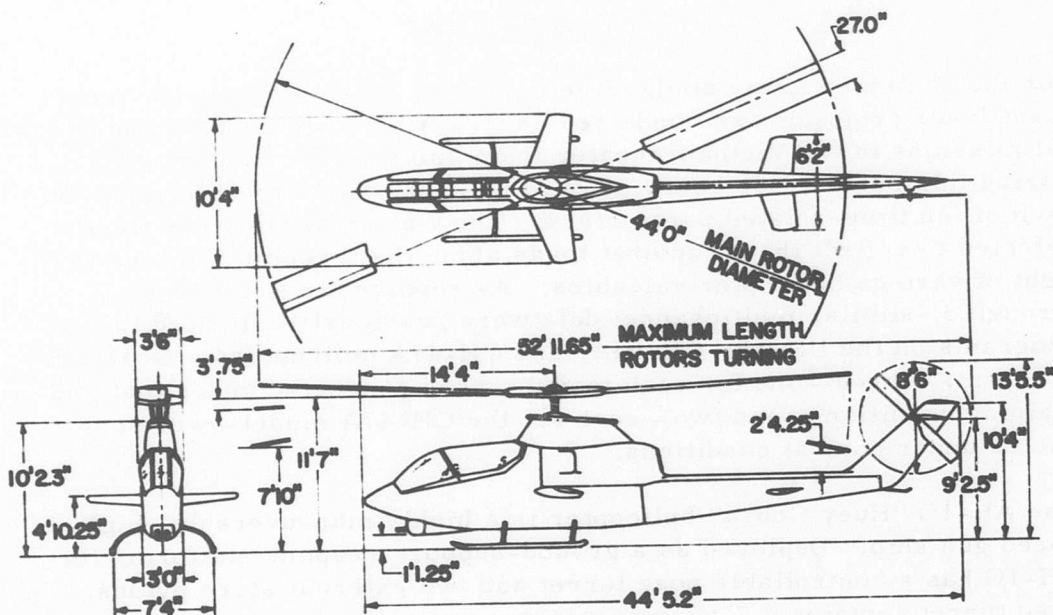
INTRODUCTION

For the continued Army study of helicopter operations, a multichannel flight loads program was conducted on five AH-1G helicopters flying combat missions in the Vietnam theater from July 1968 to January 1970. During this period, 436 hours of valid in-flight data were recorded for each of ten time-related parameters. The chosen parameters were selected to reflect the structural loads along the three major axes in the light of various helicopter variables. As reported in References 1 through 5, similar multichannel data were previously collected in five programs on the UH-1B, CH-54A, and CH-47A helicopters. Of these programs, three—one for each model—were conducted under test and training conditions, and two—each for the CH-47A model—were conducted under combat conditions.

The AH-1G "Huey Cobra" helicopter is a highly maneuverable, high-speed gun ship. Deployed as a ground-support weapons platform, the AH-1G has a controllable nose turret and two external store pylons. The nose turret contains a 7.67-mm minigun and a 40-mm grenade launcher, and each of the pylons carries such armament as the XM-159C, XM-157, XM-18, and XM-159. The crew consists of a pilot and a copilot/gunner. To illustrate the general configuration of the AH-1G, Figure 1 presents a photo and a multiview drawing of this helicopter model. In addition, this figure contains basic data identifying some of the aircraft operational characteristics and limitations.

The oscillograph type of recording system was employed to measure the following ten in-flight variables: airspeed; altitude; normal, lateral, and longitudinal acceleration at the aircraft's center of gravity; outside air temperature; rotor rpm; collective pitch stick position; longitudinal cyclic pitch stick position; and engine torque—all related in time. Field personnel logged additional information to permit the computer processing of the in-flight recordings. Such supplementary data consisted of time, fuel, and armament at takeoff and landing; base pressure and temperature at takeoff; mission type; and aircraft configuration. The data processing derived additional parameters: specifically, the instantaneous weight, the rotor tip speed ratio, and the ratio of the thrust coefficient to the rotor solidity. In addition, for the more meaningful interpretation of all parameters, the data for each flight were divided into four phases, called mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state.

All previous helicopter flight loads programs, such as those reported in References 1 through 5, were designed to collect 200 hours of valid in-flight data. The AH-1G program, however, sought the collection of 400



Summary of AH-1G Characteristics and Limitations

Characteristics:

disc area	1520 sq ft
rotor solidity	0.0652
airfoil section	9-1/3T special symmetrical
wing area	28.2 sq ft
engine	Lycoming T53-L-13
des. max. gross wt.	9500 lb
empty weight	5382 lb

Limitations

normal rate power	1250 hp
takeoff power	1400 hp
usable power (transmission limit)	1100 hp
usable power/des. max. gross wt.	0.116
max. airspeed (1100 hp)	158 kt
max. allowable airspeed	190 kt

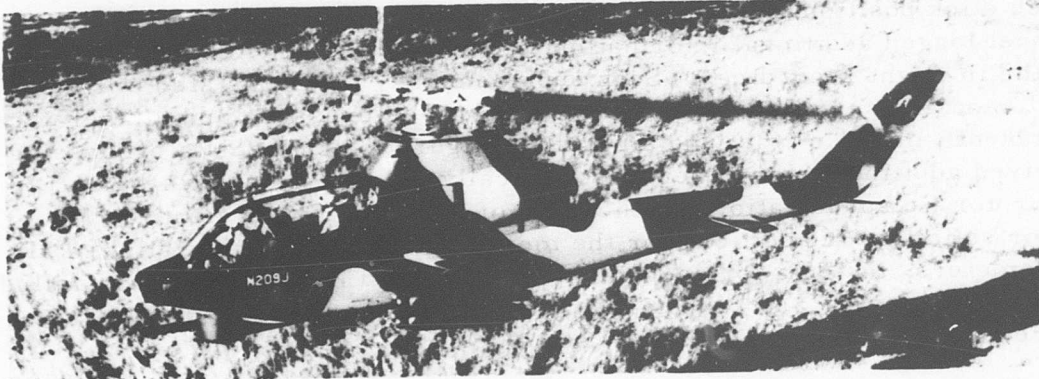


Figure 1. Photo and Multiview Drawing of AH-1G Helicopter.

hours to be chronologically separated into two data sets of 200 hours each. The two data sets were planned to make comparisons that would test the validity of 200 hours as an adequate data sample. Accordingly, the valid 200 hours collected between August 1968 and April 1969 comprised the first set, and the valid 206 hours recorded from April 1969 to November 1969 made up the second set.

The objective of the AH-1G program, therefore, was twofold: (1) to present comprehensive flight loads data on the current operation of this helicopter model in the combat environment of Vietnam, and (2) to test the validity of the 200 hours as an adequate data sample.

This report describes the aircraft instrumentation and the recording system, details the data collection, defines the recorded and derived parameters, outlines the data processing and quality control, explains the data computations, and finally presents and analyzes the processed data. Both sets of data were treated separately, and the results are presented as histograms of the percentages of time within various parameter ranges; as "exceedance" curves, that is, curves of the number of flight hours required for a parameter to reach or exceed given levels; as tables of time distributed among the coincident ranges of two or more parameters; and as tables of peak frequencies in the coincident ranges of the peaking parameter and other variables.

AIRCRAFT INSTRUMENTATION

At the Southeast Asia facility of the Army's 334th Aviation Company, an oscillographic recording system was initially installed in each of three AH-1G helicopters, identified by serial Nos. 67-15546, 67-15538, and 67-15562. The subsequent loss of two of these aircraft in combat necessitated the installation of similar recording systems in two additional AH-1G's (serial Nos. 67-15694 and 68-15612).

After each selected helicopter was equipped with the Class A provisions to accommodate its recording system, the components were installed as follows: A Century Model 409B oscillographic recorder to measure all ten in-flight parameters was positioned on a shelf behind the pilot's seat, and a Technology Incorporated Model 49776 bridge control unit to regulate the voltage signals from the various transducers was mounted on top of the recorder.

To derive airspeed, a Statham Model PL96TC-1-350 (± 0.5 psid) pressure transducer was employed to measure the dynamic pressure. To derive pressure altitude, a Statham Model P96-15-350 (0 to 15 psia) pressure transducer was employed to measure the absolute atmospheric pressure. Both transducers were mounted below the pilot's instrument panel and connected to the aircraft's pitot-static system.

For the three linear acceleration measurements, two Kistler Model 303B servo accelerometers were employed to sense the lateral and the longitudinal accelerations; a Statham Model C-3-350 accelerometer was employed to sense the vertical acceleration. All accelerometers were mounted beneath the transmission assembly as close as possible to the helicopter's center of gravity.

A frequency-to-voltage converter and associated circuitry were incorporated in the recording system to measure the rotor rpm by sensing the frequency of the rotor tachometer generator. The output signal from the generator was acquired from a terminal board behind the pilot's instrument panel.

A Minco Model S6B resistance thermal ribbon, used to measure the outside air temperature, was installed near Fuselage Station 200.

Two Lockheed Electronics Co. Model WR-8-15B position transducers were employed to sense the stick positions of the collective pitch and the longitudinal cyclic pitch controls. Both transducers were installed

beneath the transmission assembly and connected to each of the stick control tubes.

To measure the engine torque pressure, a Rahm Model PT 71-2 (0 to 100 psid) pressure transducer was installed in the engine compartment and then connected in parallel with the helicopter's torque pressure transmitter.

The block diagram in Figure 2 illustrates the functional integration of the components comprising the recording system.

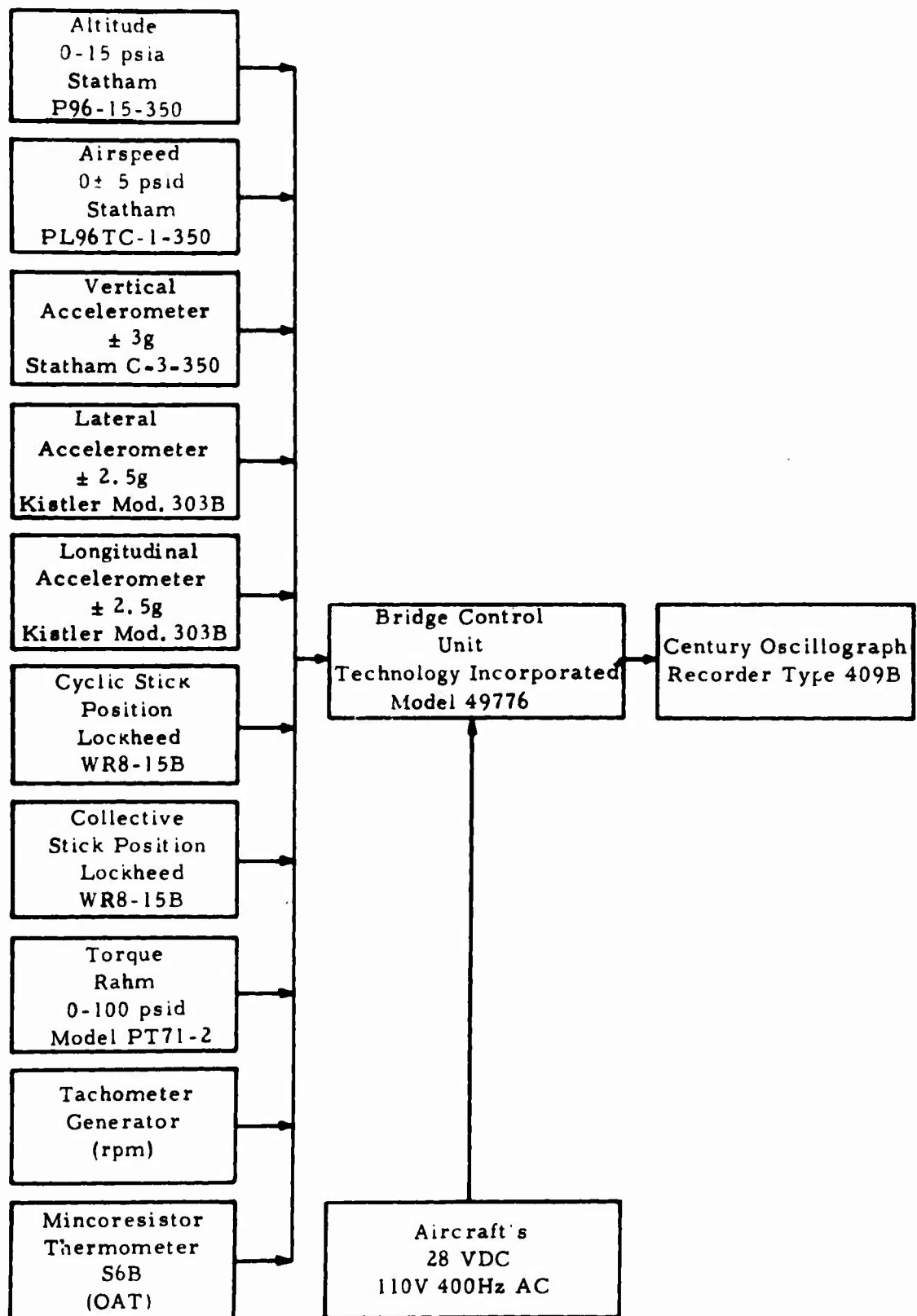


Figure 2. Block Diagram of AH-1G Instrumentation System.

OSCILLOGRAPHIC RECORDER

The Century Model 409B recorder with fourteen data channels, each capable of recording a dynamic or a static parameter on a 3-5/8-inch-wide photo-sensitive paper, was employed in this program because of its inherent design to withstand severe shock and vibration and extreme environmental conditions. In this program, ten channels were used to record the in-flight variables. Of the remaining four channels, one was used to monitor the voltage supply, another was employed to delineate a time pattern reflecting a 1-minute cycling, and the last two were used to trace constant lines for measurement references.

In this program the recording system operated from two types of power supplied by the helicopter: 110 v, 400 Hz ac, which after rectification was used in the special frequency-to-voltage circuit to measure the rotor rpm, and 28 vdc, which was used for all other operations. The recording system was normally operative when the helicopter power was on. However, the pilot could stop the recorder when extensive ground operation was anticipated and then restart it upon the resumption of flight.

DATA COLLECTION

During the data collection period from July 1968 to January 1970, 1206 hours of in-flight data were recorded. Of these hours, 436 were valid; and 408 in two sets of 202 and 206 hours were processed for the data presentation in this report. Some of the discrepancies causing the 770 hours of invalid data were erratic trace deflections, no trace deflection, insufficient trace deflection, malfunction of the oscillogram drive motor, bad galvanometer, and no supplemental flight data. When developing the oscillogram and observing such discrepancies, the field technician was aware of the cause of most of the malfunctions and took remedial action as soon as possible. Much of the flying time could not be recorded because of extended helicopter operations away from the home base which precluded changing the oscillograph magazines. In addition, severe helicopter operations at times resulted in damage to some of the accelerometers and outside-air-temperature sensors. Occasionally, malfunctions in the helicopter system prevented the recording of the parameters intended to monitor the helicopter's mechanical operation, notably rotor rpm and engine torque.

After each recorded flight, the field technician, aided by the pilot, filled out a special form to log the supplemental data needed to process the oscillogram data. Such additional information included the flight date; helicopter configuration; mission type; airspeed and rotor rpm at check points; takeoff elevation, atmospheric pressure, and temperature; and at both takeoff and landing, the base, time, fuel, and armament weight. In addition, the field technician logged the serial number for each transducer to permit correlating the calibration data with the recorded data during the final data processing.

DATA DEFINITIONS

RECORDED PARAMETERS

The ten in-flight parameters recorded on the oscillograms against a time base consisted of (1) altitude, (2) airspeed, (3) outside air temperature, (4) vertical acceleration, (5) lateral acceleration, (6) longitudinal acceleration, (7) rotor rpm, (8) engine torque pressure, (9) longitudinal cyclic pitch control stick position, and (10) collective pitch control stick position. For each of these parameters, Table I lists the ranges selected to study the parameter relationships most practically and significantly.

With the assumption of a standard atmosphere prevailing during the data recording, the altitude and airspeed trace measurements, proportional to the static pressure and the pitot-static pressure differential, respectively, were converted from pressure units to the conventional pressure altitude and indicated airspeed units. The outside air temperature was then used to convert pressure altitude to density altitude, the derived form of the altitude expressed in the final data. Of the remaining parameters, acceleration is represented as a load factor, engine torque as a torque pressure, and the control stick positions as percentages of full deflection with both the full-forward position of the cyclic pitch stick and the full-down position of the collective pitch stick being zero percent.

COMPUTED PARAMETERS

From the fuel and armament at takeoff and landing, as logged on the supplemental data sheets, the gross weight was computed for the start and end of each flight. A constant rate of fuel consumption was assumed to obtain an average weight-loss rate that was used to compute the instantaneous gross weight. Weight losses because of armament drops were introduced at the times noted on the supplemental data sheets.

For each data reading point, two derived parameters were added to the data bank: (1) the rotor tip speed ratio, and (2) the ratio of the thrust coefficient to the rotor solidity.

The rotor tip speed ratio, μ , was computed by

$$\mu = \frac{V}{\Omega R}$$

where V = airspeed, ft/sec
 Ω = rotor angular velocity, rad/sec
 R = rotor radius, ft

TABLE I. PARAMETER RANGES WITH CODE IDENTIFICATION

Mission Segments	Altitude (ft)	Indicated Airspeed (knots)	Climb Rate (ft/min)
1 Ascent	1 < 1000	1 < 40	1 < -2100
2 Maneuvers } Transient	2 \geq 1000 to < 2000	2 \geq 40 to < 60	2 \geq -2100 to < -1800
3 Descent	3 \geq 2000 to < 5000	3 \geq 60 to < 70	3 \geq -1800 to < -1500
4 Cruise Steady State	4 \geq 5000 to < 10000	4 \geq 70 to < 80	4 \geq -1500 to < -1200
	5 \geq 10000 to < 15000	5 \geq 80 to < 90	5 \geq -1200 to < -900
	6 \geq 15000	6 \geq 90 to < 100	6 \geq -900 to < -600
		7 \geq 100 to < 110	7 \geq -600 to < -300
		8 \geq 110 to < 120	8 \geq -300 to < 300
		9 \geq 120 to < 130	9 \geq 300 to < 600
		10 \geq 130 to < 140	10 \geq 600 to < 900
		11 \geq 140 to < 150	11 \geq 900 to < 1200
		12 \geq 150 to < 160	12 \geq 1200 to < 1500
		13 \geq 160 to < 170	13 \geq 1500 to < 1800
		14 \geq 170 to < 180	14 \geq 1800 to < 2100
		15 \geq 180	15 \geq 2100
RPM	Weight (lb.)	Collective or Cyclic Steady Stick (%)	Collective or Cyclic Stick Peaks (%)
1 < 295	1 < 6000	1 < 10	1 < -40
2 \geq 295 to < 310	2 \geq 6000 to < 7000	2 \geq 10 to < 20	2 \geq -40 to < -30
3 \geq 310 to < 325	3 \geq 7000 to < 8000	3 \geq 20 to < 30	3 \geq -30 to < -20
4 \geq 325 to < 330	4 \geq 8000 to < 9000	4 \geq 30 to < 40	4 \geq -20 to < -10
5 \geq 330 to < 340	5 \geq 9000	5 \geq 40 to < 50	5 \geq -10 to < 10
6 \geq 340 to < 355		6 \geq 50 to < 60	6 \geq 10 to < 20
7 \geq 355		7 \geq 60 to < 70	7 \geq 20 to < 30
		8 \geq 70 to < 80	8 \geq 30 to < 40
		9 \geq 80 to < 90	9 \geq 40
		10 \geq 90	
		C_T/π	
		1 < 0.06	
		2 \geq 0.06 to < 0.09	
		3 \geq 0.09 to < 0.12	
		4 \geq 0.12 to < 0.15	
		5 \geq 0.15	
A/S Acceleration (ft/sec ²)	μ	Torque (psi)	Outside Air Temperature (°F)
1 < -15	1 < 0.0	1 < 10	1 < 0.0
2 \geq -15 to < -12	2 \geq 0.00 to < 0.05	2 \geq 10 to < 20	2 \geq 0.0 to < 10
3 \geq -12 to < -9	3 \geq 0.05 to < 0.10	3 \geq 20 to < 30	3 \geq 10 to < 20
4 \geq -9 to < -6	4 \geq 0.10 to < 0.15	4 \geq 30 to < 40	4 \geq 20 to < 30
5 \geq -6 to < -3	5 \geq 0.15 to < 0.20	5 \geq 40 to < 50	5 \geq 30 to < 40
6 \geq -3 to < 3	6 \geq 0.20 to < 0.25	6 \geq 50 to < 60	6 \geq 40 to < 50
7 \geq 3 to < 6	7 \geq 0.25 to < 0.30	7 \geq 60 to < 70	7 \geq 50 to < 60
8 \geq 6 to < 9	8 \geq 0.30 to < 0.35	8 \geq 70	8 \geq 60 to < 70
9 \geq 9 to < 12			9 \geq 70 to < 80
10 \geq 12 to < 15			10 \geq 80 to < 90
11 \geq 15			11 \geq 90

And the ratio of thrust coefficient to the rotor solidity, that is, C_T/σ , was computed by

$$C_T/\sigma = \frac{W}{\rho^2 (CR)^2 \sigma}$$

where C_T = thrust coefficient

W = gross weight, lb (instantaneous)

ρ = air density at altitude, slugs/ft³

σ = rotor solidity

MISSION SEGMENTS

For the more meaningful analysis of the helicopter performance and loads, the data for each flight were separated into four mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. The first three segments are the transient, or unsteady, regimes of flight and were distinguished from the steady-state segment by the variation in the stick position, airspeed, and altitude traces. The segments were identified and defined as follows: Mission Segment 1 (takeoff and ascent) included both the takeoff and climb to the initial cruise altitude and all other unsteady ascents to other altitudes. Mission Segment 2 (maneuver) included all weapons passes and those altitude changes not appearing in Segments 1 or 3. Mission Segment 3 (descent, flare, and landing) included the unsteady part of flare and landing and all other unsteady descents. Mission Segment 4 (steady state) included cruise, hover, steady ascent (after the initial climb), and steady descent. Flare and landing initiated from hover was included in Mission Segment 4. Such steady-state parts were evidenced by minimal fluctuation of the stick position traces about mean values and the constancy or smooth change of the airspeed and altitude traces.

DATA PROCESSING

DATA EDITING

Each oscillogram is examined by the data processing editors for evidence of any instrumentation anomaly such as a missing trace, improper sensitivity, etc. Any record discovered as faulty is classified as malfunction data and is not processed. The editors then time all acceptable records and identify the bounds for the four mission segments in each flight.

After demarcating the flights into mission segments, the editors mark the traces as follows to govern the data reading. The normal acceleration trace was marked wherever a peak met the following two conditions: (1) the peak fell outside prescribed threshold levels ($\pm 0.2g$ about the $1.0g$ mean), and (2) the peak had a rise and fall (or fall and rise) that were each 50 percent of the peak value or $0.2g$, whichever was greater. Although the prescribed thresholds were 0.8 and $1.2g$, the editors used levels of 0.84 and $1.16g$ to ensure the inclusion of all valid peaks. However, any of the peaks read within the fixed threshold levels of 0.8 and $1.2g$ were eliminated during the computer processing. In addition, the editors identified each selected peak as being maneuver- or gust-induced. To determine whether a peak was induced by a maneuver or a gust, the editors noted the behavior of the stick position traces. Whenever the peak was the result of maneuvering, one or both of the stick traces would always deflect just before and in the same sense as the peak. Ascertaining that a peak was gust induced was difficult because of the very high activity of the control sticks. Ascertaining the gust-induced peaks required either that both stick position traces be steady or that any movement of these traces just before the peak be in the sense opposite that of the peak.

The editors marked primary peaks on the lateral and longitudinal acceleration traces wherever they deflected outside the prescribed threshold of $\pm 0.1g$. These peaks were not identified as being maneuver- or gust-induced. As before, to ensure inclusion of all valid peaks, the editors used levels of $\pm 0.097g$ in lieu of the $\pm 0.1g$. Again, however, any peaks read within the prescribed threshold of $\pm 0.1g$ were eliminated during the computer processing.

In treating the two stick position traces, the editors marked those peaks whose rise or fall was 10 percent of the full stick travel and at least 10 percent from the normal value. Each normal value depended on the mission segment. For the steady-state mission segment, the normal values were the steady values of the stick positions just before and after the peak. For the three transient mission segments (where no "steady"

stick positions prevailed), an arbitrary set of normal values was chosen to approximate the stick positions during hover. The selected values are listed by aircraft serial number in Table II.

TABLE II. CONTROL STICK NORMAL VALUES USED DURING TRANSIENT MISSION SEGMENTS

<u>Aircraft Serial No.</u>	<u>Longitudinal Cyclic Normal (%)</u>	<u>Collective Normal (%)</u>
67-15562	59.5	41.3
67-15538	58.4	43.5
67-15694	54.6	36.6

In each of the three transient mission segments, all traces except those for the stick positions were marked when the acceleration or stick position traces peaked. During all mission segments, however, all traces except that for acceleration were marked at critical points to permit an adequate representation of the parameters. At the peaks of normal acceleration, n_z , the corresponding values of longitudinal acceleration, n_x , and lateral acceleration, n_y , were read. At the peaks of n_x and n_y , the corresponding values of n_z and cyclic stick position were read.

The peak values of the three linear accelerations were measured from normal positions of the respective traces. For both the vertical acceleration, n_z , and the lateral acceleration, n_y , the normal position was defined when the helicopter was at rest. For the longitudinal acceleration, n_x , the normal position was defined when the helicopter cruised at a 90-knot airspeed. The positive sense of the longitudinal load factor, n_x , is acceleration forward, and the positive sense of the lateral load factor, n_y , is acceleration to the right.

DATA READING AND QUALITY CONTROL

All data points selected during the editing were measured on semiautomatic oscillogram readers which transcribed the measurements directly to punched cards. When all data were extracted from a flight, a print-out of the cards was given to the Quality Control Section for preliminary data checking. Using standard quality control techniques, this section manually remeasured random points comprising an adequate sample and compared the measurements with those produced by the semiautomatic readers. The differences obtained between the two sets of readings were

used to establish the mean and standard deviations as a control of the desired reading accuracy. The flights whose measurements did not meet the accuracy standard so established were reread by the semiautomatic readers. In addition to obtaining accurate values, this procedure ensured a uniform interpretation and measurement of the traces.

When all data had been processed, the mean and standard deviations were calculated for the entire data sample. Assuming a normal distribution of reading errors, 99.7 percent of the readings should be within three standard deviations of the true values. Based on average calibration values, Table III shows the three standard deviation for each parameter.

TABLE III. DATA READING VARIATIONS BY PARAMETER

<u>Parameter</u>	<u>3σ Variation</u>
Altitude	± 224 ft (at 1000 ft)
Airspeed	± 2.2 kt (at 120 kt)
n_x	$\pm 0.032g$
n_y	$\pm 0.032g$
n_z	$\pm 0.038g$
OAT	$\pm 0.84^\circ F$
Rotor rpm	± 4.4 rpm
Engine Torque	± 1.9 psi
Collective Pitch	$\pm 3.0\%$
Cyclic Pitch	$\pm 3.6\%$

DATA COMPUTATIONS

The load factor, n_z , for each normal acceleration peak was measured directly from the oscillogram trace. However, to present load factors for positive and negative peaks conveniently, an incremental normal load factor, Δn_z , was derived from each n_z value by using the relationship

$$\Delta n_z = n_z - 1.0$$

The following equation (see Reference 6) was used to compute density altitude, since this parameter is normally used in describing helicopter performance:

$$h_d = 145,300 \left[1 - \left(\frac{518.4 P_a}{29.92 (OAT + 460)} \right)^{0.235} \right]$$

stick positions prevailed), an arbitrary set of normal values was chosen to approximate the stick positions during hover. The selected values are listed by aircraft serial number in Table II.

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The load factor, n_z , for each normal acceleration peak was measured directly from the oscillogram trace. However, to present load factors for positive and negative peaks conveniently, an incremental normal load factor, Δn_z , was derived from each n_z value by using the relationship

$$\Delta n_z = n_z - 1.0$$

The following equation (see Reference 6) was used to compute density altitude, since this parameter is normally used in describing helicopter performance:

$$h_d = 145,300 \left[1 - \left(\frac{518.4 \text{ Pa}}{29.92 (\text{OAT} + 460)} \right)^{0.235} \right]$$

Since the instrument installation correction to derive the calibrated airspeed was judged to be negligible, only indicated airspeeds were considered. Rotor rpm and outside air temperature were computed by applying linear calibrations to the trace measurements. With the displacements of the stick position traces representing the deflections of the longitudinal cyclic stick from the full-forward position and the deflections of the collective stick from the full-down position, the respective stick positions were computed from the trace measurements in units of percent of full deflection. By an approximate differentiation of the altitude trace, the rate of climb was computed continuously during each segment. At the same time that the rate of climb was computed, the "longitudinal acceleration," or rate of change of airspeed, was derived by an approximate differentiation of the airspeed trace.

DATA PRESENTATION

As discussed in the Introduction, 408 of the 436 valid data hours were separated chronologically into two data sets of about 200 hours each to test the validity of 200 hours as an adequate data sample. Accordingly, the first 202 hours recorded by April 1969 made up the first set and was identified as Sample I, and the remaining 206 hours collected through the rest of the recording period constituted the second set and was termed Sample II.

The data presented in this report consist of two types of figures and two types of tables. The two graphic types are histograms of the percentages of time within various parameter ranges and plots of the time in hours to reach or exceed given levels of the incremental vertical load factor, Δn_z . For convenience, these plots have been called "exceedance curves." The two tabular types are flight time distributed among the coincident ranges of two or more parameters, and the vertical acceleration peak frequencies distributed among the ranges of the vertical load factor, n_z , and the coincident ranges of other variables.

DISCUSSION OF FIGURES

All graphs depicting the results from the two data samples are shown in Figures 3 through 28. The graphic representations for Samples I and II are presented consecutively.

For the direct comparison of the flight time spent in the mission segments, Figures 3 and 4 show histograms for the percentage of total flight time spent in each mission segment, and Figures 5 and 6 show histograms for the percentage of flight time in each gross weight range spent in each mission segment. The comparison of the two data samples in Figures 3 and 4 indicates that most of the larger percentage for the maneuver segment in Sample I is offset by the larger percentage for the steady-state segment in Sample II. This difference is attributed to the Sample II flights being generally longer than the Sample I flights, since the Sample I flights averaged 1.12 hours and the Sample II flights 1.42 hours. In general, however, the two data samples compare closely.

The favorable comparison of the two sets of percentages is further evidenced by the contrast of these percentages with those previously presented as a guide for the expected distribution of the AH-1G flight time among the four Vietnam mission segments. In the given order of the mission segments, data extracted from the usage projections of the Bell Helicopter Company give the following distribution: ascent, 6.5%; maneuver, 27.4%; descent, 2.0%; and steady state, 63.1%. The largest discrepancies

in the comparison of these percentages with those in the data samples are in the maneuver and the steady-state segments. These differences are ascribed to the fact that the anticipated sustained cruise to and from the target area was higher than that actually measured in the data of most of the flights. The actual combat data revealed that the AH-1G's, while en-route to and from the target areas, frequently left cruise altitudes with abrupt ascents and descents for apparent searches of enemy activity. Some of these departures were weapon passes; others were sufficiently pronounced in parameter changes to be also classified in the maneuver segment.

Figures 7 through 20 present histograms of the percentage of time spent in the parameter ranges during each mission segment. Figures 7 and 8 for gross weight show that almost all the time in each data sample was spent between 8,000 and 10,000 pounds. The comparison of the two data samples shows that the Sample I data have more time in the 9,000- to 10,000-pound range than the Sample II data. This difference is attributed to the shorter flights of Sample I. Since most of the flights took off at maximum weight, the shorter flights would, of course, result in a greater percentage of time at the higher weights.

Two armament configurations, known as the light Hog and the heavy Scout, prevailed in most flights. The takeoff weight of the light Hog with two XM-159C's and two XM-157's varied from 9187 to 9410 pounds, and that of the heavy Scout with two XM-18's and two XM-159's ranged from 9299 to 9522 pounds. These weights varied because of the various mission configuration and fuel combinations. For example, some flights took off with 1400 pounds of fuel instead of the normal 1200 pounds.

The rotor rpm distribution in Figures 9 and 10 show that more than 95 percent of the time in both data samples was flown between 310 and 325 rpm with the normal steady value being between 315 and 318. A very small amount of time was recorded in the 340- to 355-rpm range during the maneuver segment. All such recordings occurred during weapon pass descents. The highest value of 351 rpm was recorded during a descent which appeared to approach an autorotation. Rotor rpm limits are 294 to 324 rpm for continuous operation and 339 rpm maximum for autorotation.

Figures 11 and 12 indicate that most of the AH-1G flight time was spent within the 2000- to 5000-foot density altitude range for all four mission segments. These figures also indicate a small amount of time above 10,000 feet and none above 15,000 feet. The higher percentage of time above 2000 feet in the Sample II data is attributed to two factors: (1) the longer Sample II flights with a greater part of the flight at the higher

cruise altitudes, and (2) the greater number of Sample II flights during the summer months when the temperatures averaged slightly higher than those during the rest of the year, thereby accounting for the higher density altitude.

In the breakdown of the mission segment time by the percentage in the ranges of outside air temperature, Figures 13 and 14 show that the range of 70° to 80°F dominated in the Sample I data but that the range of 80° to 90°F generally prevailed in the Sample II data. As discussed in the previous paragraph, the higher temperatures in the Sample II data contributed to the higher density altitudes in these data.

Figures 15 and 16 show that most of the time in climbs and descents was spent in the range of ± 300 -foot-per-minute altitude changes. Of particular note is the close correlation between the percentages in the corresponding mission segments of the two data samples. Such correlation indicates that pilot operating procedures remained uniform throughout the recording period.

Figures 17 and 18 show the percentage of flight time spent in each engine torque range of each mission segment. Most of the time was spent at torques between 20 and 50 psi, a small amount of time above 60 psi, and none above 70 psi. The greater percentage of time of the Sample II data in the higher torque ranges during the steady-state segment is attributed to the higher density altitudes in these data. The maximum continuous torque limit is 50 psi.

For the airspeed study, Figures 19 and 20 show both data samples with nearly two-thirds of the flight time in the 80- to 120-knot range, the normal operational range for the AH-1G. Only the descent and maneuver segments in both data samples had any time recorded at airspeeds above 150 knots. The maximum airspeed attained in the Sample I data was 185 knots and that in the Sample II data was 183 knots. The first occurred at an altitude of 5300 feet and a gross weight of 7546 pounds as the aircraft was pulling out of a descent at 5000 feet per minute; the second occurred at an altitude of 3447 feet and a gross weight of 8763 pounds as the aircraft was performing a weapons pass. In general, the airspeed during weapons passes ranged between 115 and 130 knots. The maximum allowable airspeed is 190 knots.

Figures 21 through 24 present exceedance curves of the time to reach or exceed given incremental normal load factor levels. For both positive and negative peaks, Figures 21 and 22 show the exceedance curves for each mission segment, and Figures 23 and 24 do the same for each gross

weight range. The curves for the respective mission segments and weight ranges do not deviate from expected patterns, and the comparison of the corresponding curves in the two data samples indicates a reasonable agreement. The composite curves for the two data samples in Figures 21 and 22 are in close agreement for the positive peaks up to $0.8 \Delta n_z$; thereafter, the Sample I curve evidences higher frequencies to indicate that the load factor spectrum for the Sample I data is more severe at the higher Δn_z levels.

For the practical illustration of the relationship between maneuver load factor peaks, n_z , and tip speed ratio, μ , Figures 25 and 26 represent the frequency of such peaks in coincident normal load factor and tip speed ratio ranges by first giving a range-symbol plot and then an actual number tabulation of the frequencies. That both data samples have the greatest concentration centered on the combined ranges of 1.2 to 1.3 normal load factor and 0.15 to 0.20 tip speed ratio is stressed by the solid symbols in the range-symbol plot. Again, the two data samples are in close agreement.

Figures 27 and 28 present, for both positive and negative peaks, exceedance curves of the time to reach or exceed given incremental normal load factor levels. Although the comparison of the two data samples indicates that the gust loads in the Sample II data are considerably more severe than those in the Sample I data, no definitive conclusions should be drawn because the extensive maneuvering of the helicopters made it difficult to distinguish the maneuver-induced peaks from the gust-induced ones in the oscillogram recordings.

DISCUSSION OF TABLES

All final computer printouts resulting from the processing of the 408 hours of valid data are presented in Tables IV through XXXVIII for the Sample I data, and Tables XXXIX through LXXIII for the Sample II data. All times in these tables were rounded off to the nearest tenth of a minute. Therefore, the "TOTAL" time and the individual times in each table are accurate to within 0.05 minute. However, since the individual times comprising the respective totals were summed before the totals were rounded off, the sum of individual times may differ from the corresponding printed total time by some tenths of a minute. Any time between 0 and up to but not including 0.05 minute was printed as "0.0", and no time measured was printed as "0.". Tables having neither points nor time were not printed.

Table headings are arranged so that the first-mentioned variable refers to the horizontal ranges at the top of the table and the second-mentioned variable refers to the vertical ranges at the left of the table. Where a third or a fourth variable is given, it is followed by its range in the heading. As an example, the heading "MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 BY MISSION SEG. ASCENT" indicates the time spent in coincident ranges of altitude and airspeed at a weight between 6000 and 7000 pounds during the ascent mission segment. All printed range values are the lower limits.

Tables IV through VIII for Sample I and Tables XXXIX through XLIII for Sample II give the flight time recorded in the coincident ranges of the various variables. In the tables containing engine torque data, the total time is less than that reported for the entire program. This discrepancy was due to the difficulty of recording valid engine torque data. Rather than expending more time and funds to meet the requirements of 400 hours of valid engine torque data, Technology Incorporated, with the approval of USAAVLABS, simply processed the available valid data. Still, the final data came close to the requirement since the engine torque data in Sample I represents 166 hours and that in Sample II, 170 hours.

To analyze the stick position variations, Tables IX through XXII for Sample I and Tables XLIV through LVII for Sample II present the frequencies of stick position peaks in the coincident ranges of each of the two stick positions and other variables.

For the review of the normal accelerations encountered, Tables XXIII through XXVI for Sample I and Tables LVIII through LXI for Sample II present the frequencies of both the maneuver and the gust normal acceleration peaks in the coincident ranges of incremental normal load factor and other variables.

Tables XXVIII through XXXII for Sample I and Tables LXII through LXVII for Sample II present the frequencies of the longitudinal and lateral acceleration peaks in the coincident ranges of the corresponding load factor and other variables.

Finally, for the correlation of the accelerations along each of the three major axes, Tables XXIII through XXXVIII for the Sample I data and Tables LXVIII through LXXIII for the Sample II data present the peak frequencies of each type of acceleration in the coincident ranges of the given type of acceleration and of each of the other two types.

SUMMARY AND CONCLUSIONS

The AH-1G program produced twofold results: (1) a set of comprehensive loads and operational data defining the AH-1G performance in the combat environment of Vietnam, and (2) evidence that 200 hours of recorded data serves as a valid data sample. The resultant data may be used to determine the loading spectrum for cyclic load tests on helicopter structures as well as to conduct a parametric fatigue analysis and, thereby, project the safe life of each helicopter. In the comparison of the histograms and exceedance curves for the first 202 hours of data (Sample I) and the second 206 hours (Sample II), not only did the two data samples agree closely, but all discrepancies were reasonably explained.

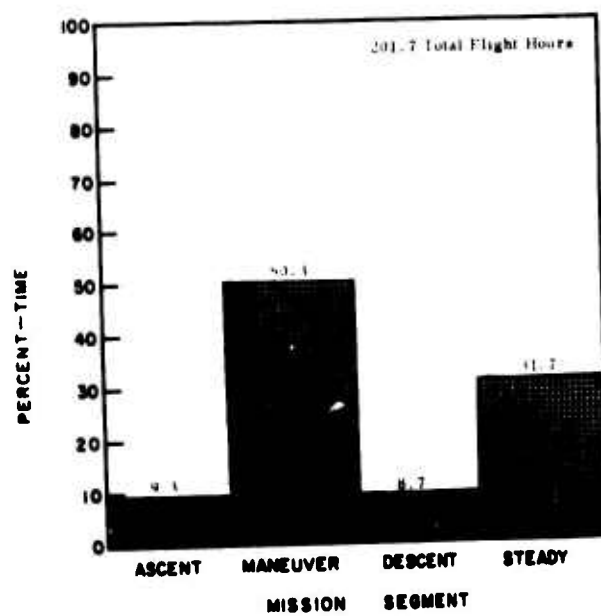


Figure 3. Percentage of Time in Each Mission Segment (Sample I).

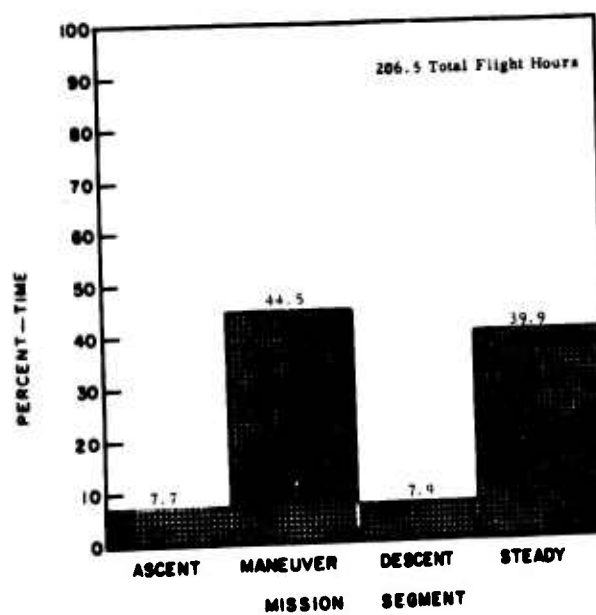
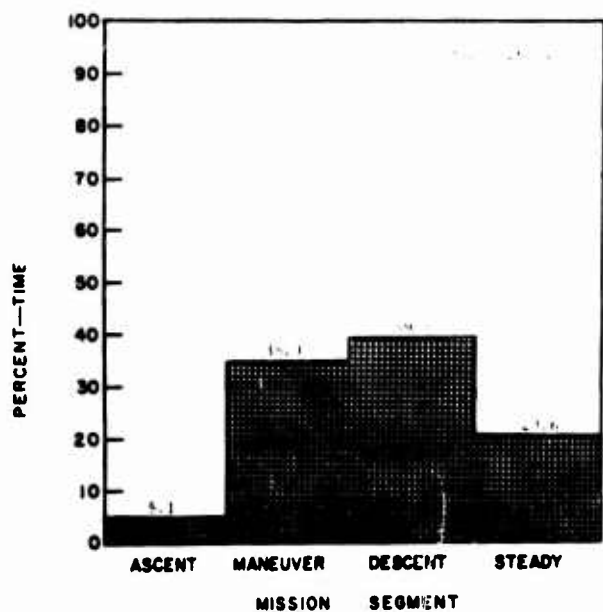
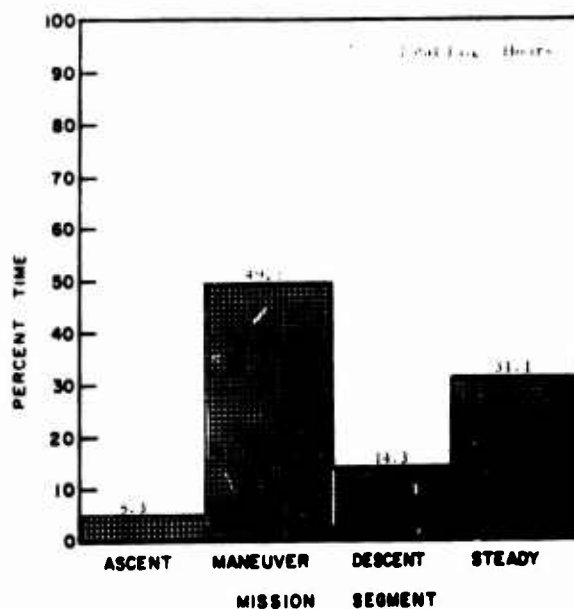


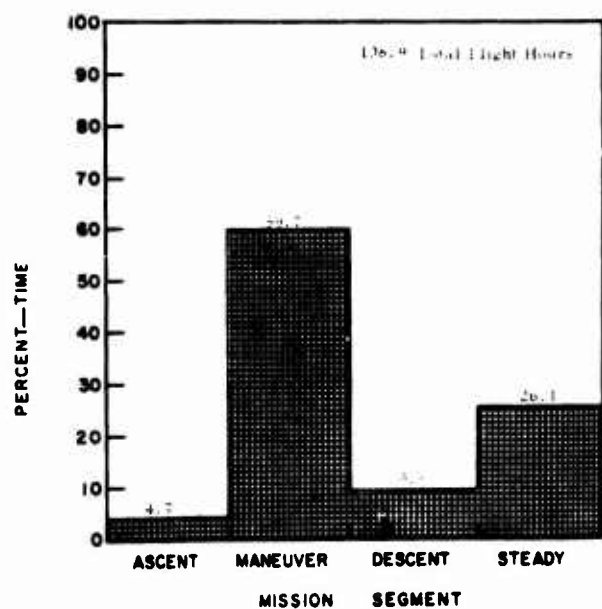
Figure 4. Percentage of Time in Each Mission Segment (Sample II).



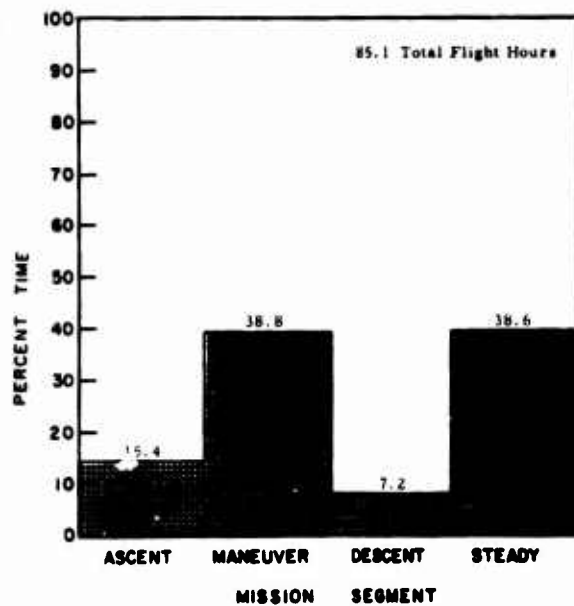
a. 6,000 to 7,000 lb



b. 7,000 to 8,000 lb

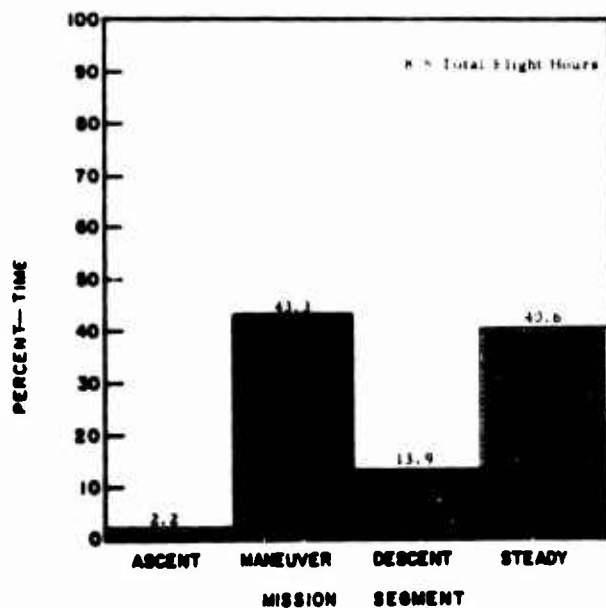


c. 8,000 to 9,000 lb

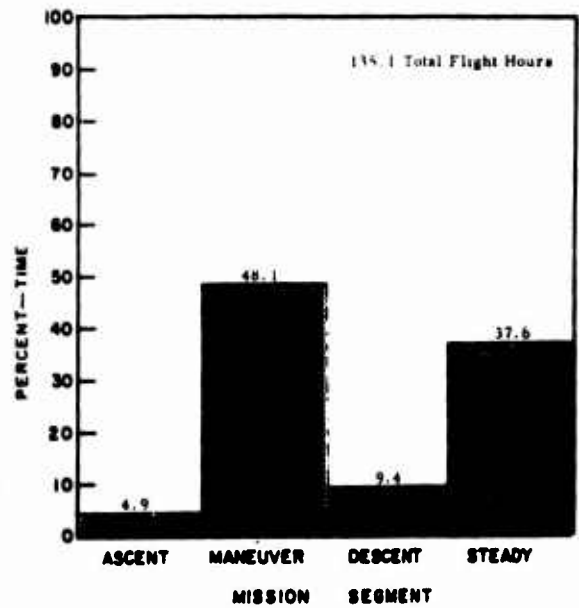


d. Above 9,000 lb

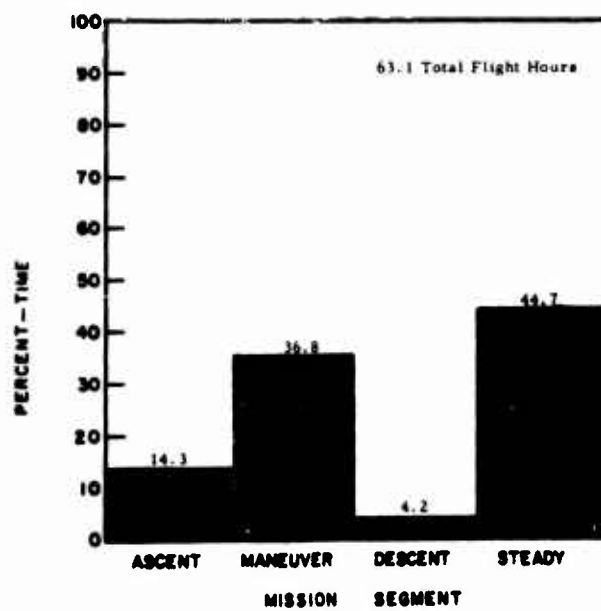
Figure 5. Flight Time in Each Gross Weight Range Broken Down by Percentage of Time in Each Mission Segment (Sample I).



a. 7,000 to 8,000 lb

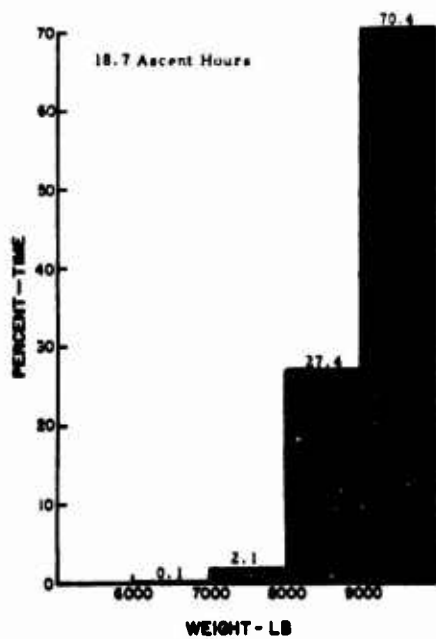


b. 8,000 to 9,000 lb

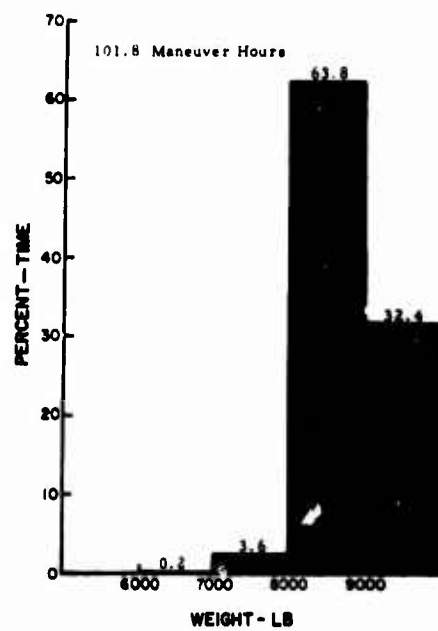


c. Above 9,000 lb

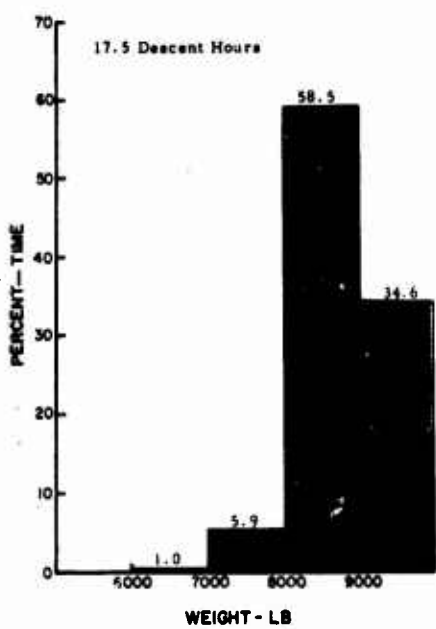
Figure 6. Flight Time in Each Gross Weight Range Broken Down by Percentage of Time in Each Mission Segment (Sample II).



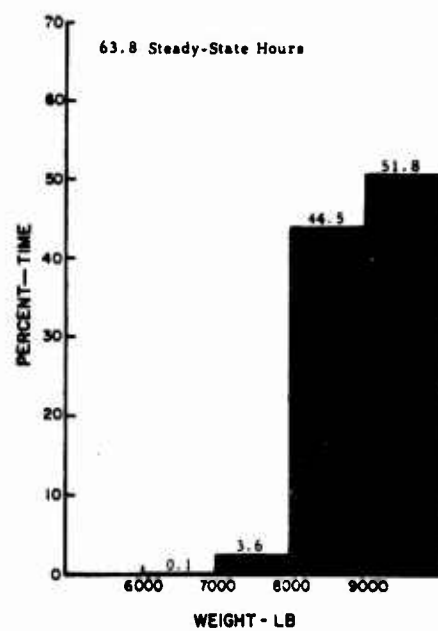
a. Ascent



b. Maneuver

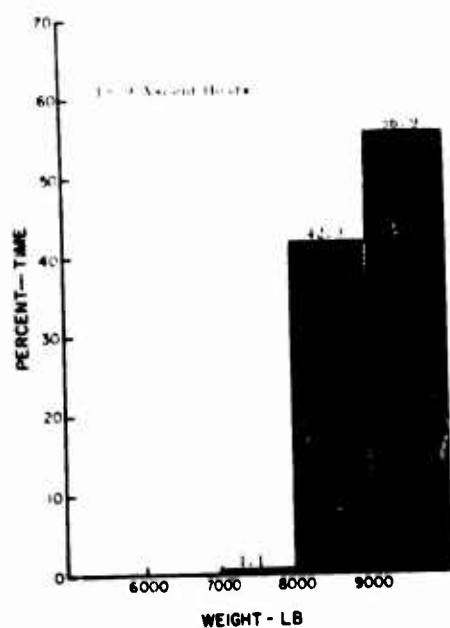


c. Descent

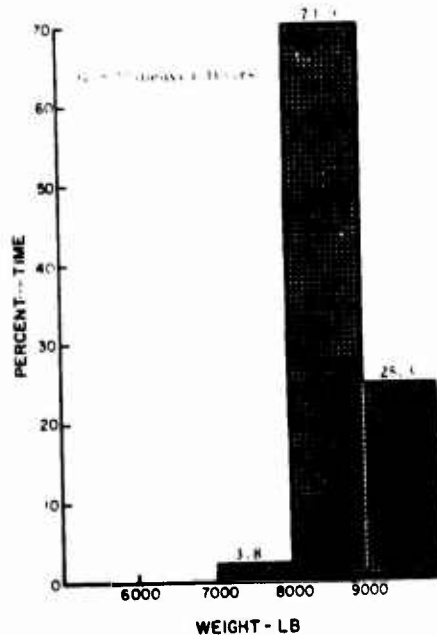


d. Steady State

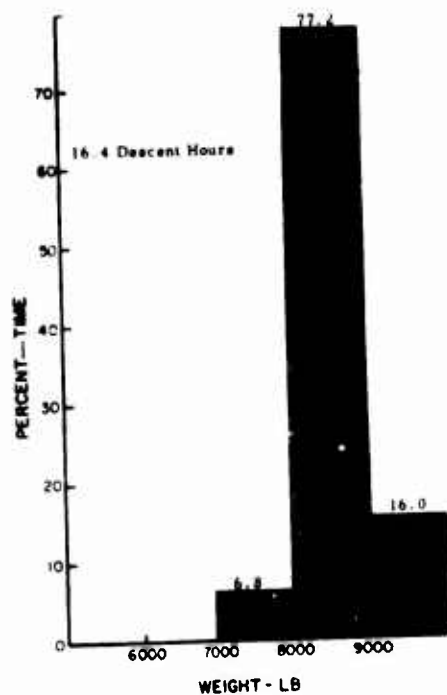
Figure 7. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Gross Weight Range (Sample I).



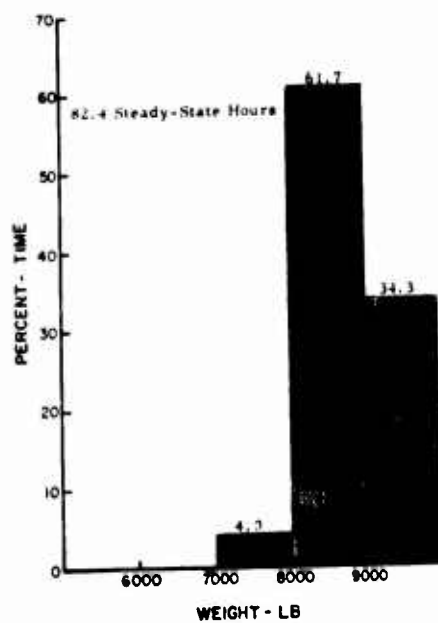
a. Ascent



b. Maneuver

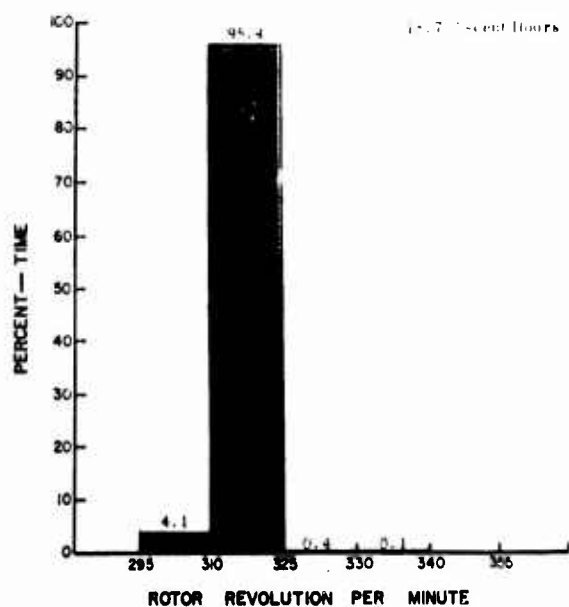


c. Descent

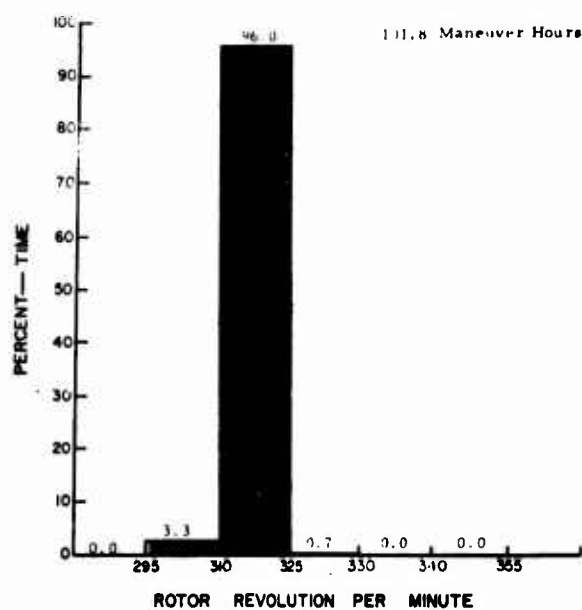


d. Steady State

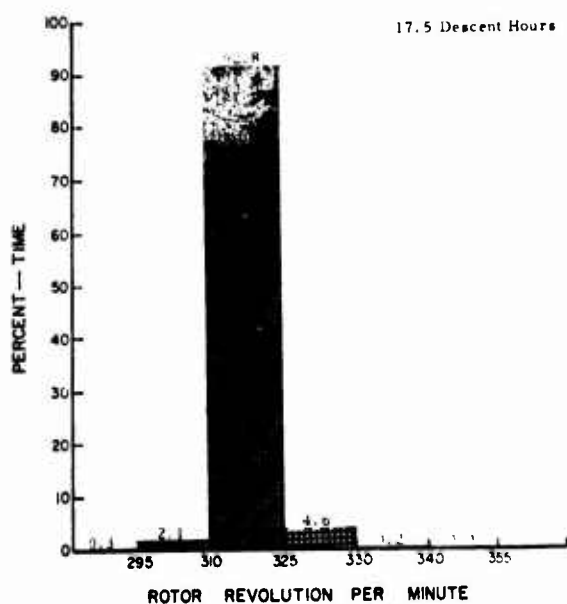
Figure 8. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Gross Weight Range (Sample II).



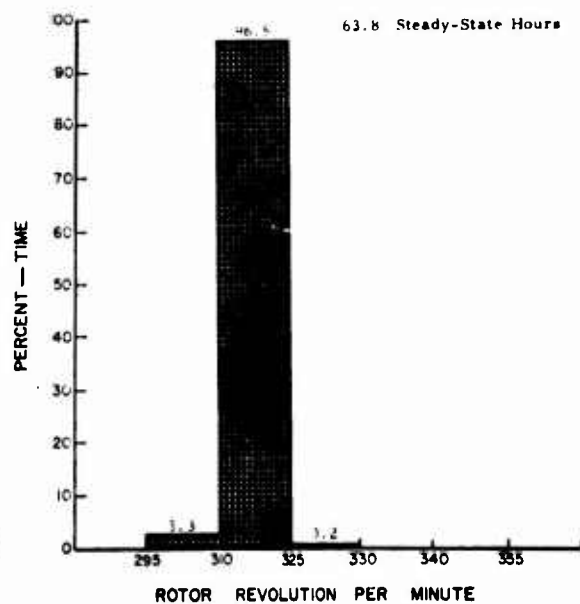
a. Ascent



b. Maneuver

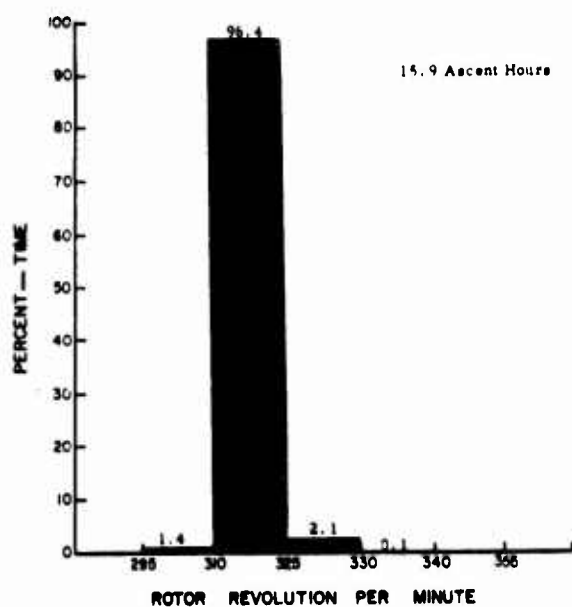


c. Descent

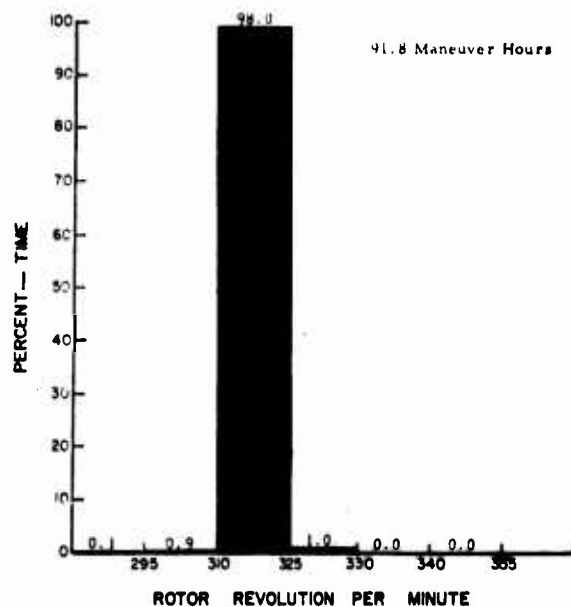


d. Steady State

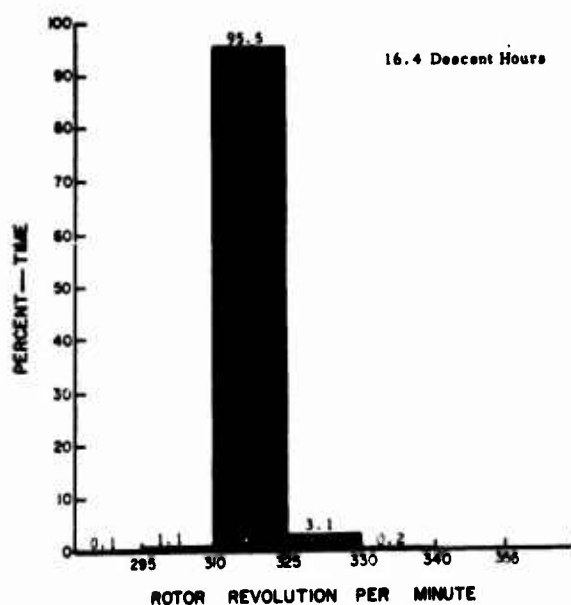
Figure 9. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rotor RPM Range (Sample I).



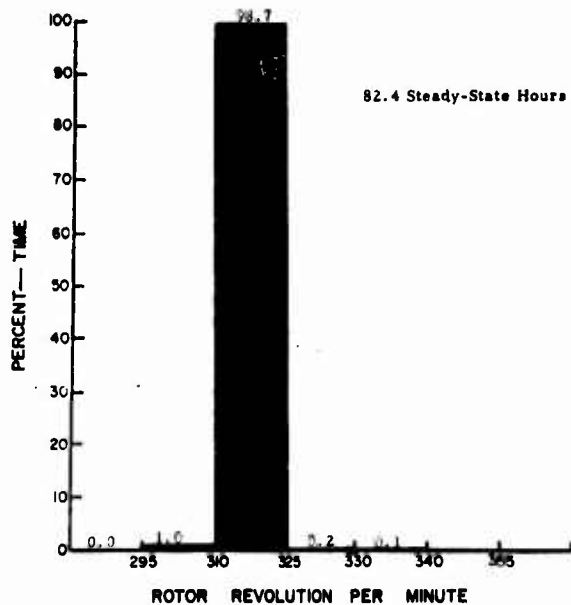
a. Ascent



b. Maneuver

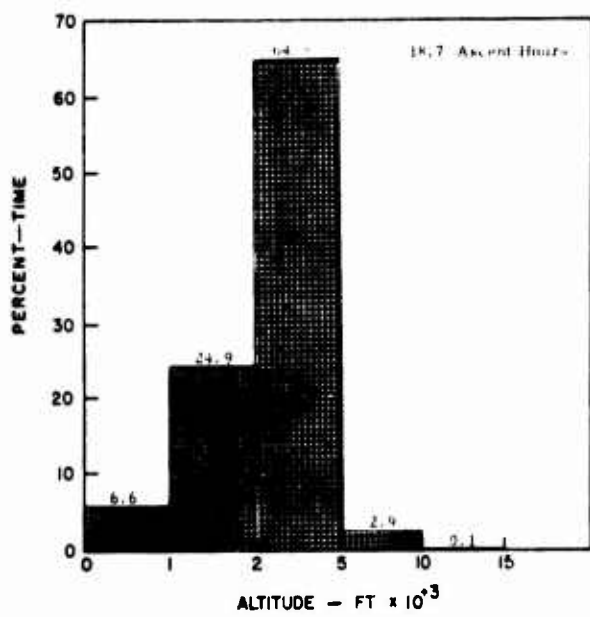


c. Descent

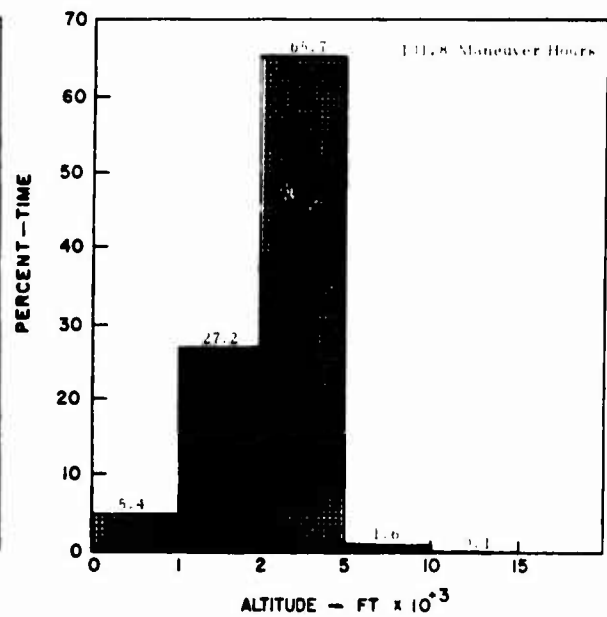


d. Steady State

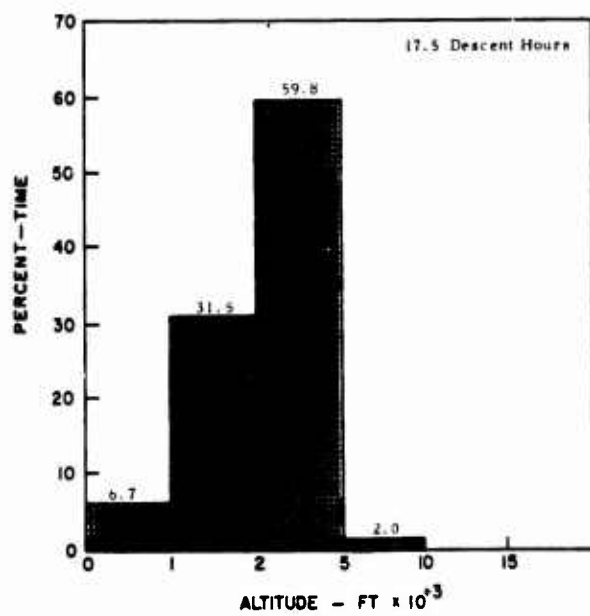
Figure 10. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rotor RPM Range (Sample II).



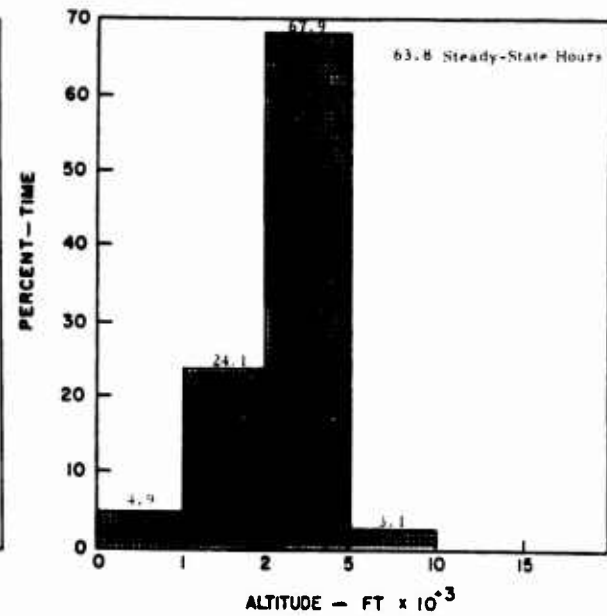
a. Ascent



b. Maneuver

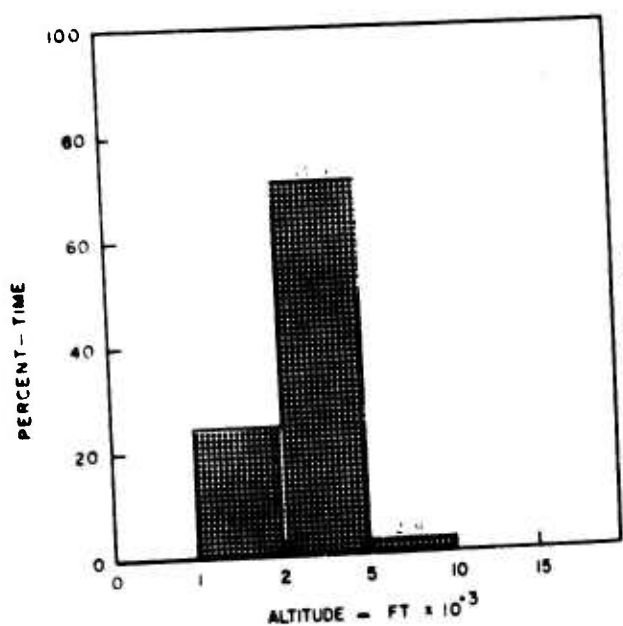


c. Descent

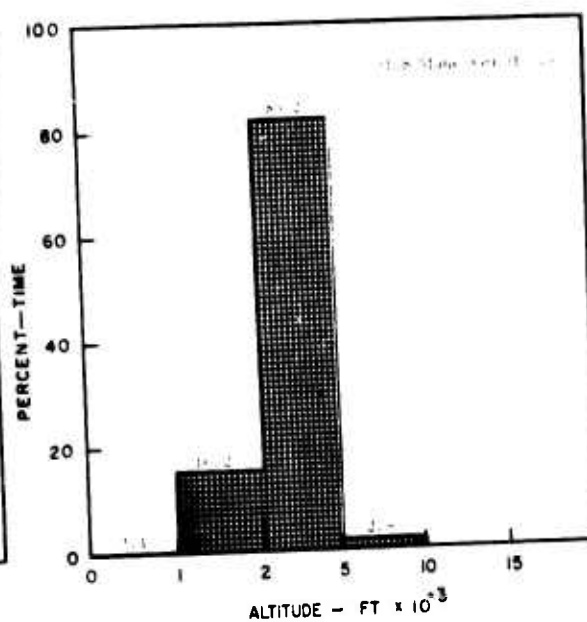


d. Steady State

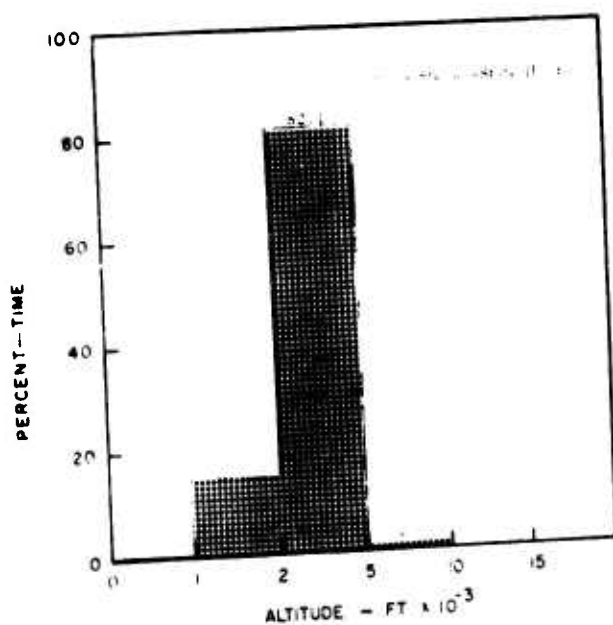
Figure 11. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Altitude Range (Sample I).



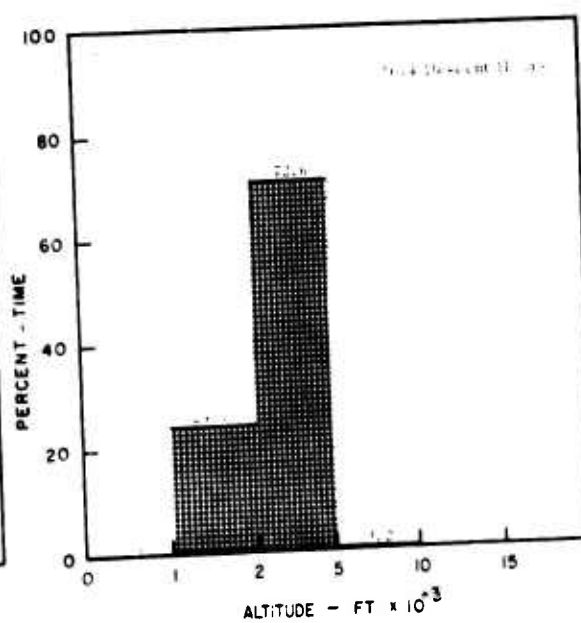
a. Ascent



b. Maneuver

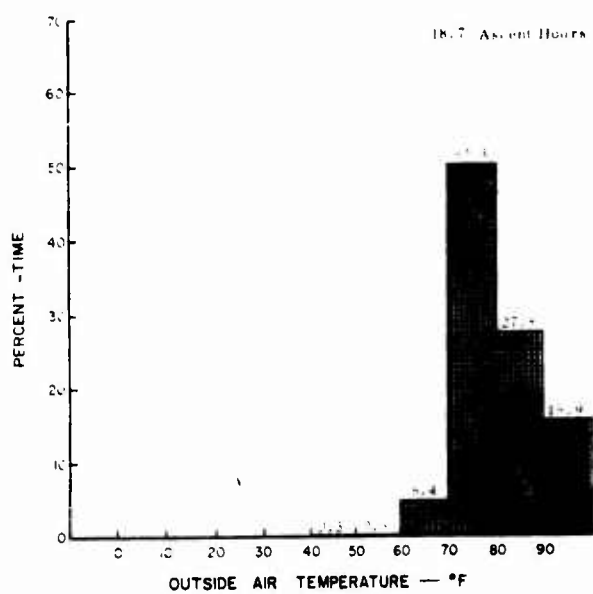


c. Descent

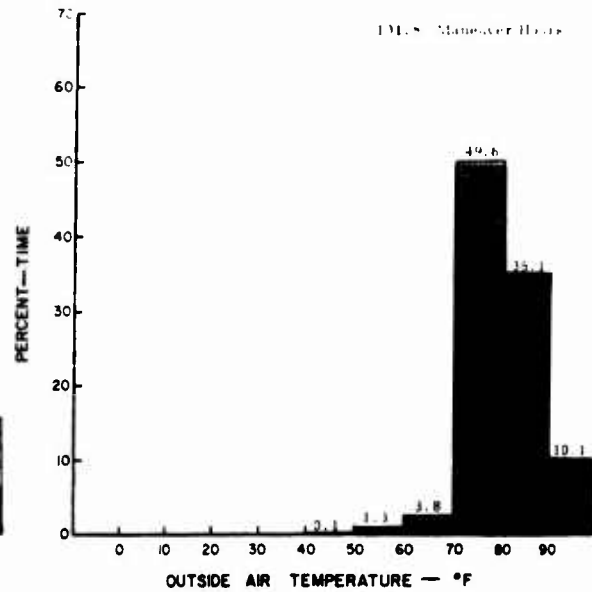


d. Steady State

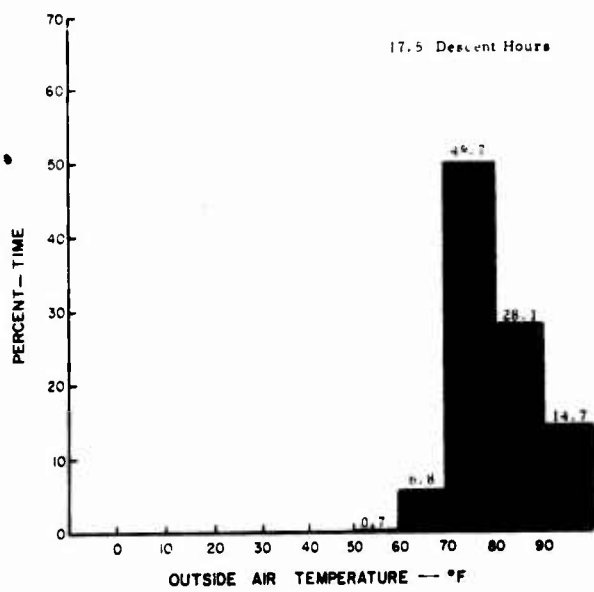
Figure 12. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Altitude Range (Sample II).



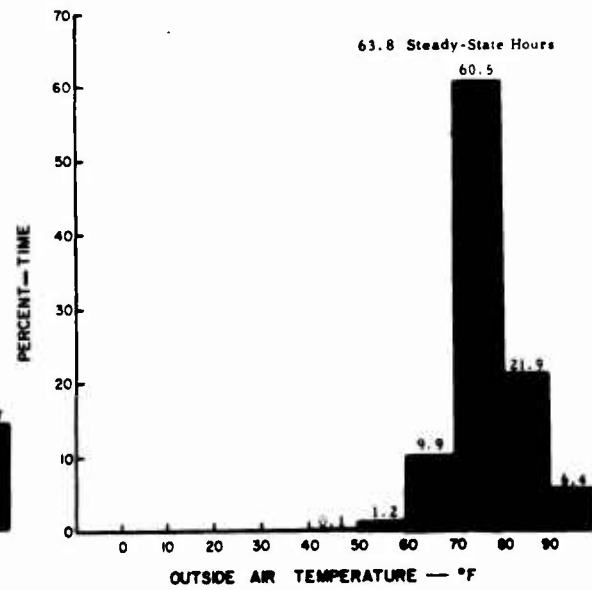
a. Ascent



b. Maneuver

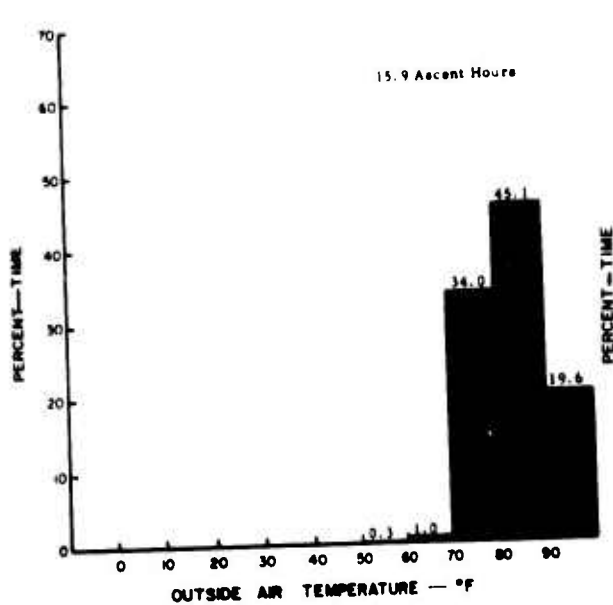


c. Descent

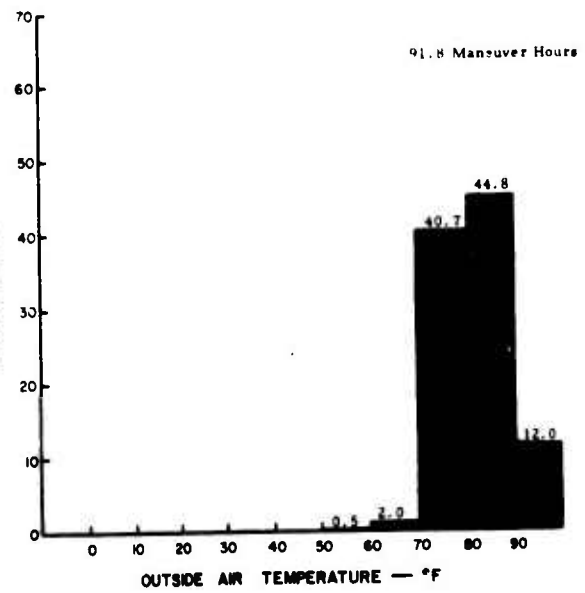


d. Steady State

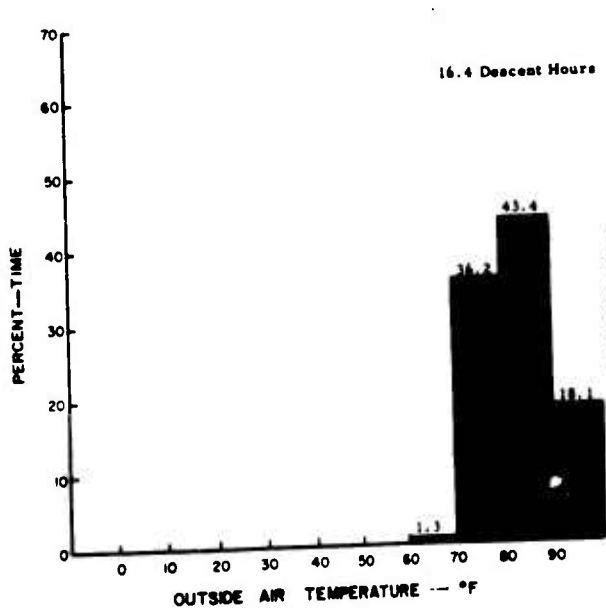
Figure 13. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Outside Air Temperature Range (Sample I).



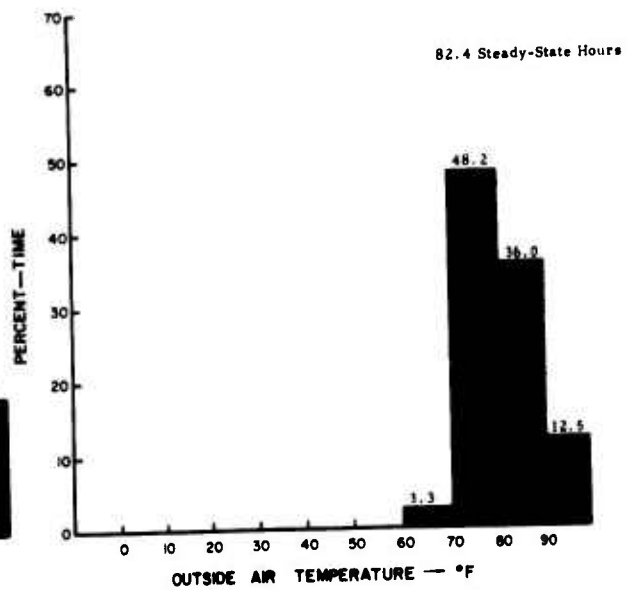
a. Ascent



b. Maneuver

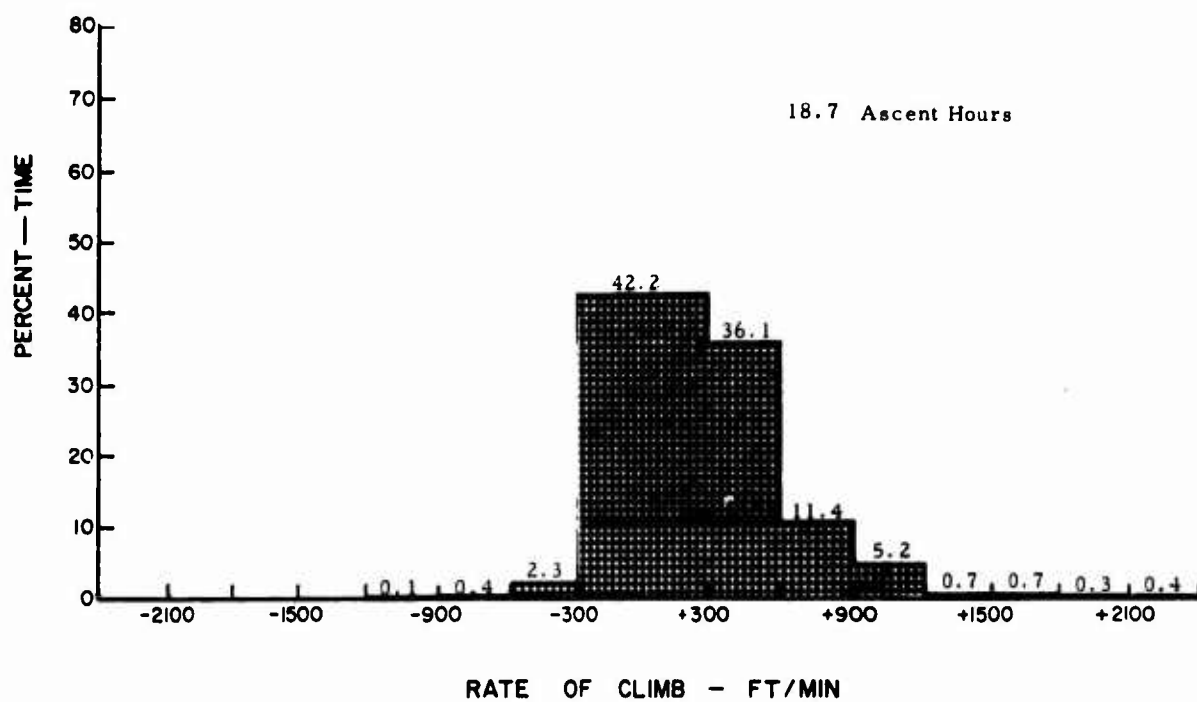


c. Descent

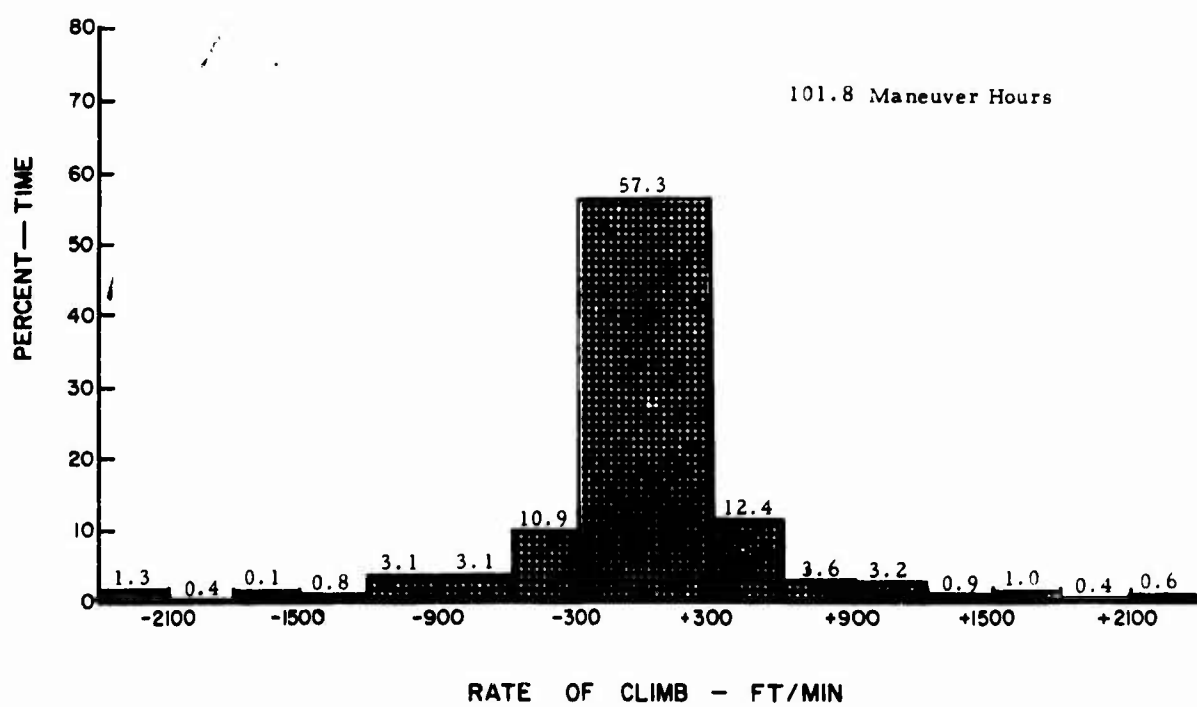


d. Steady State

Figure 14. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Outside Air Temperature Range (Sample II).



a. Ascent



b. Maneuver

Figure 15. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rate-of-Climb Range (Sample I).

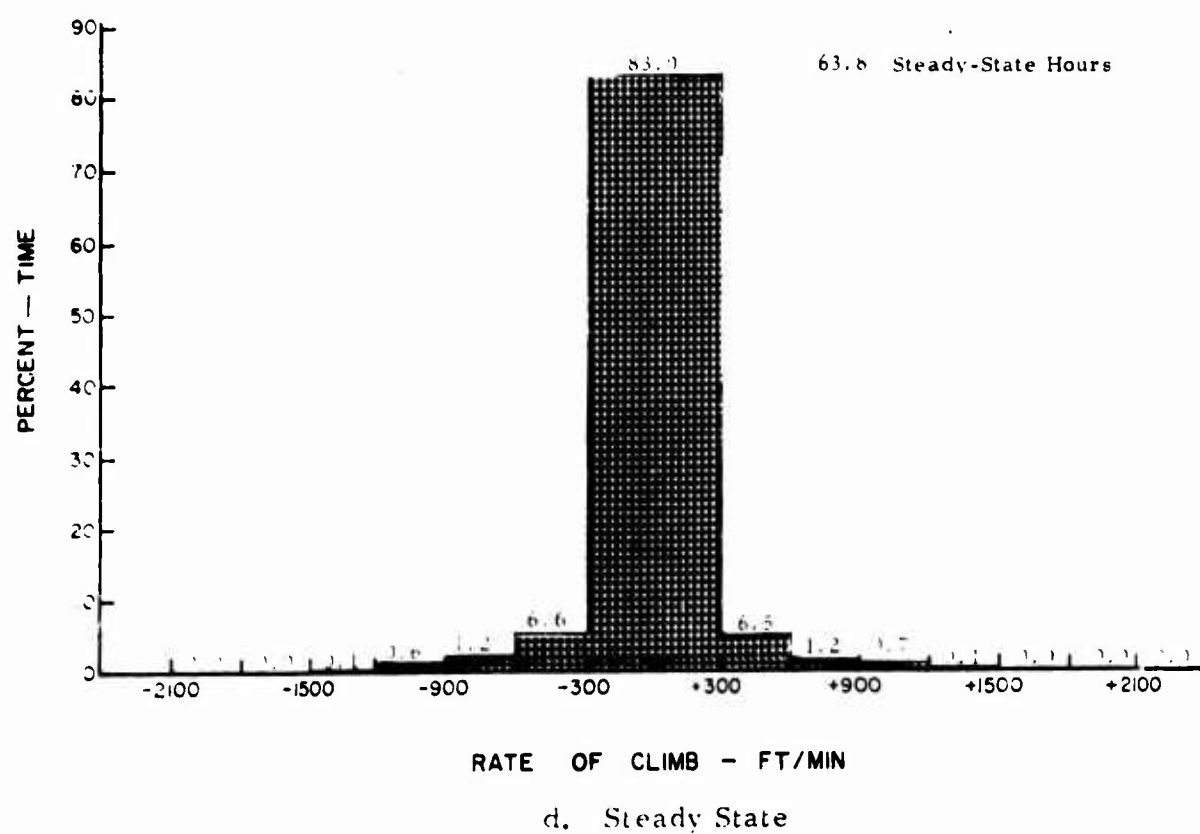
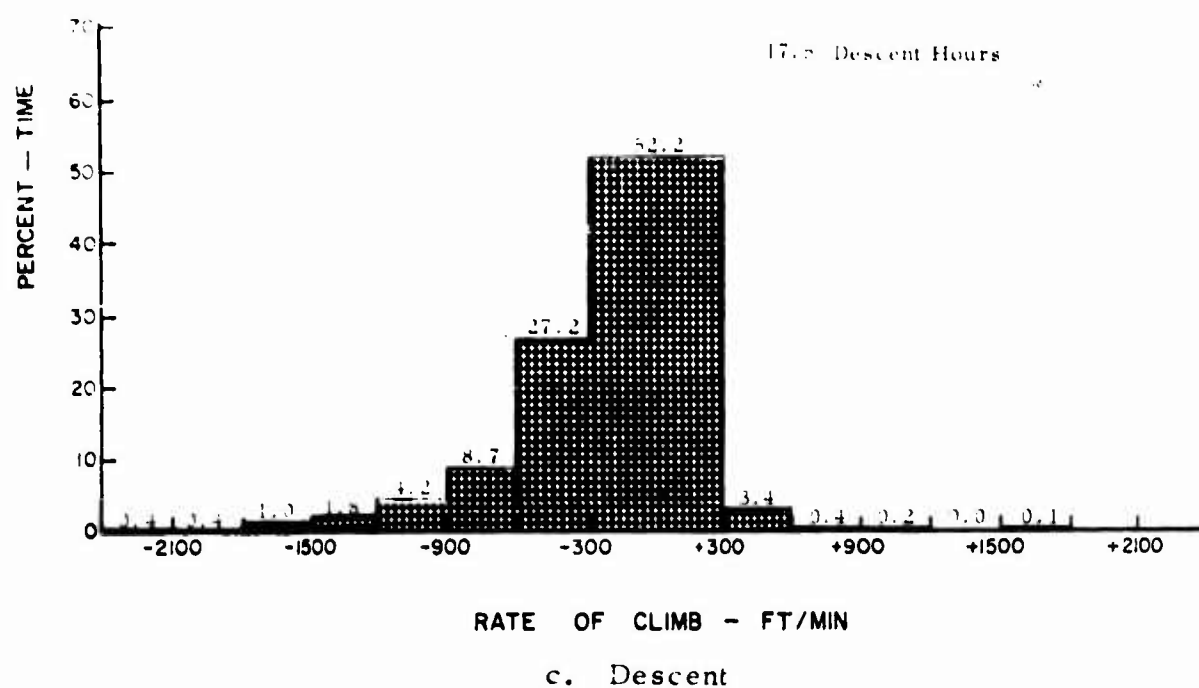
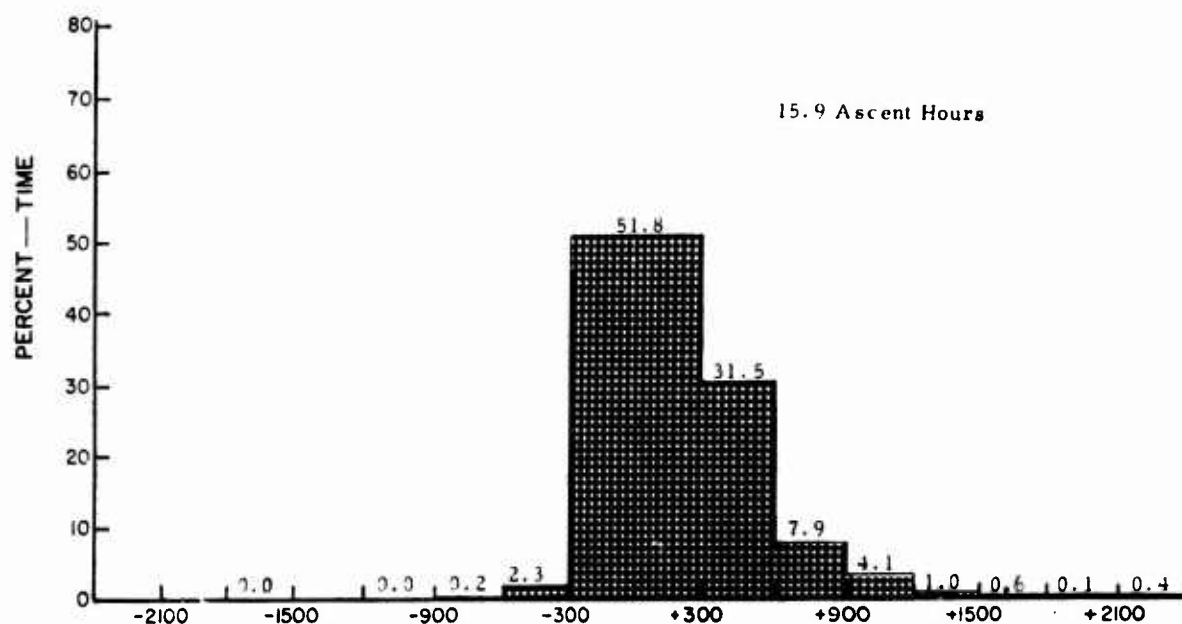
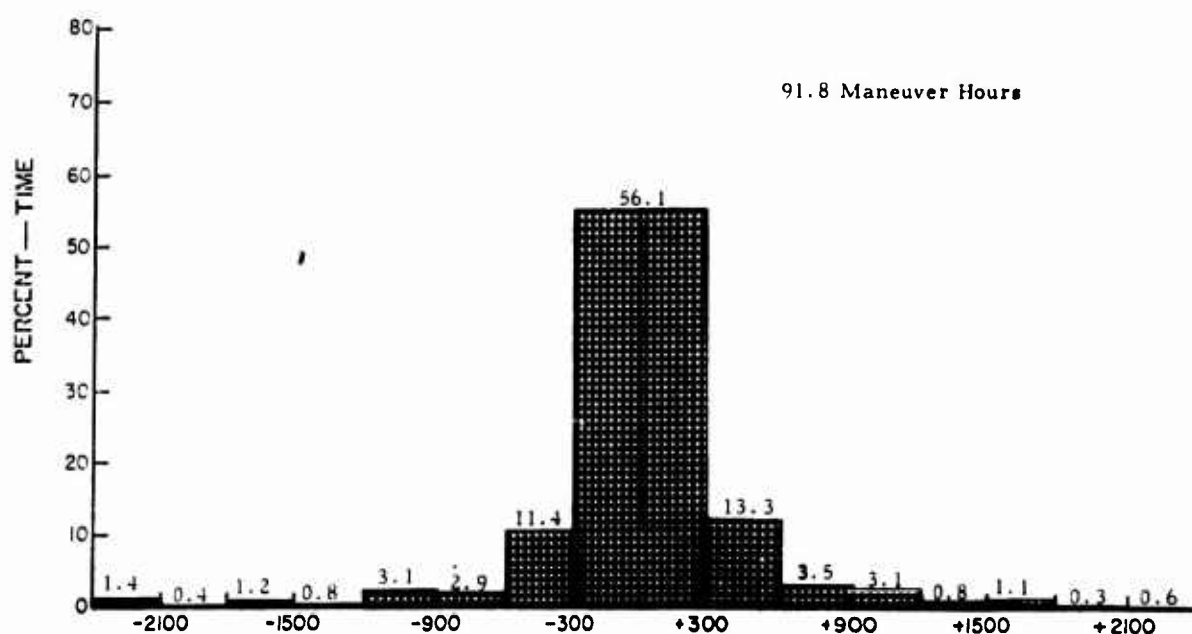


Figure 15. Concluded.



RATE OF CLIMB - FT/MIN

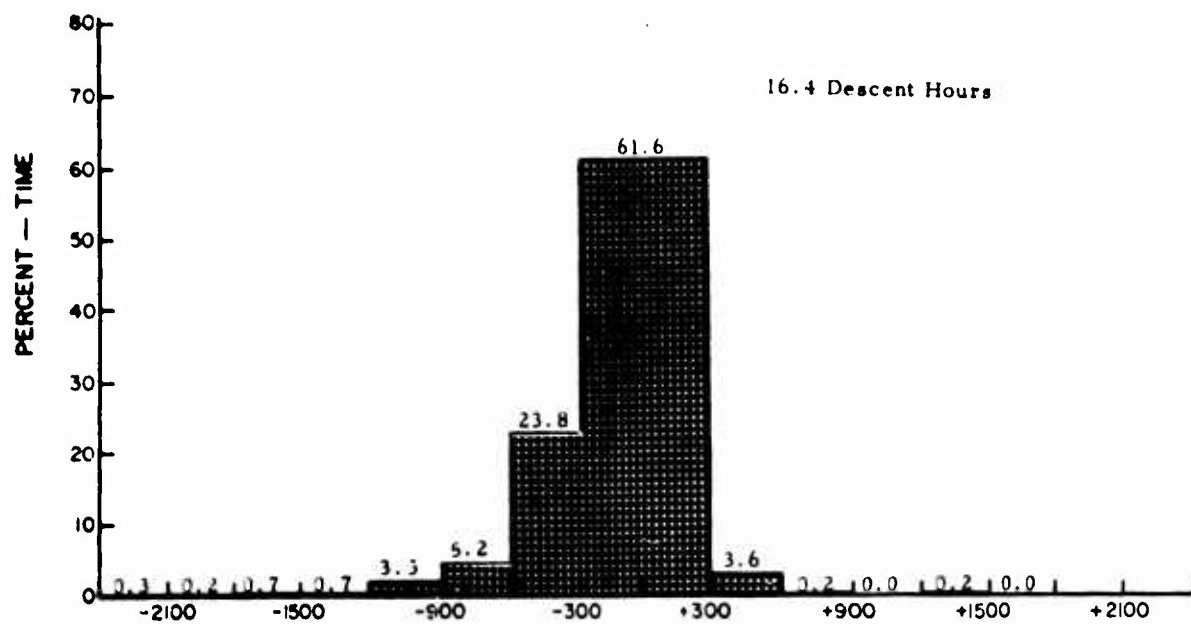
a. Ascent



RATE OF CLIMB - FT/MIN.

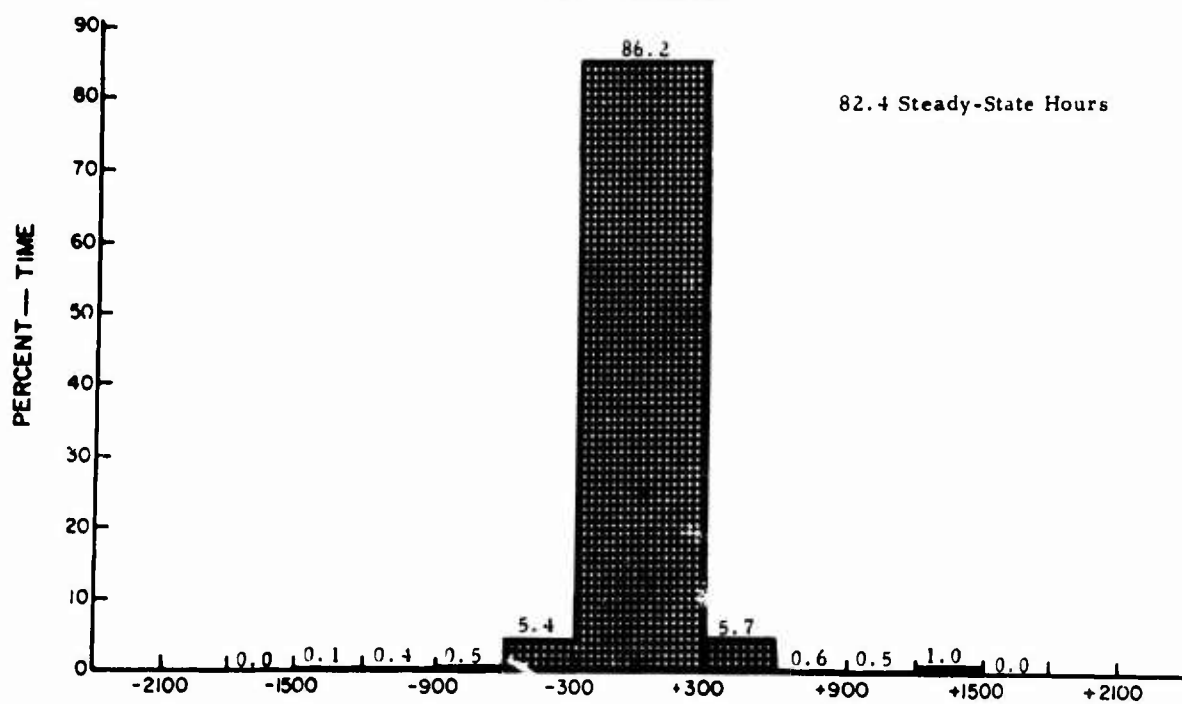
b. Maneuver

Figure 16. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Rate-of-Climb Range (Sample II).



RATE OF CLIMB - FT/MIN

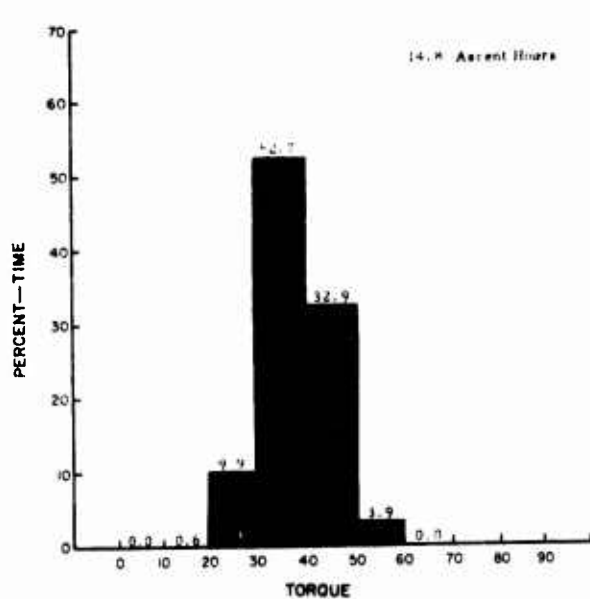
c. Descent



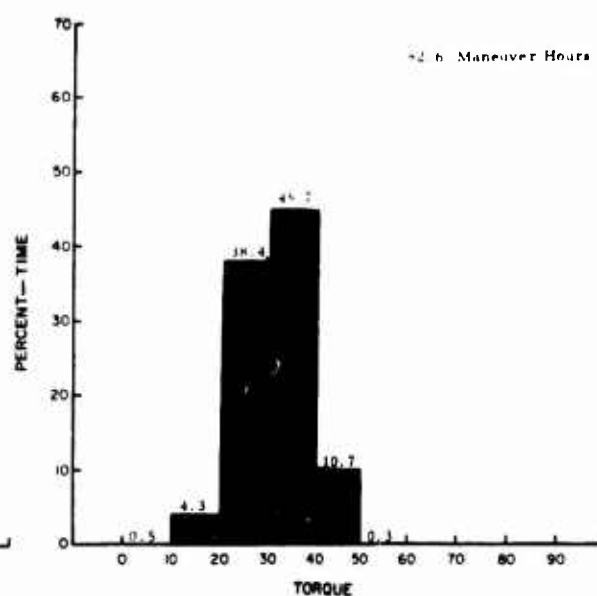
RATE OF CLIMB - FT/MIN

d. Steady State

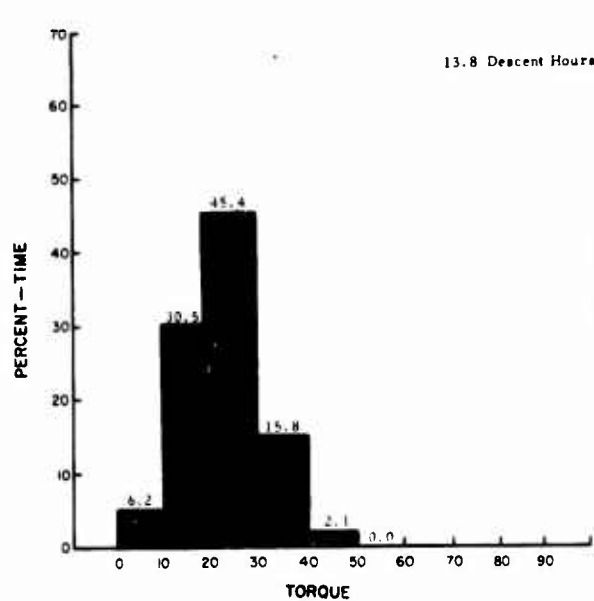
Figure 16. C' ncluded.



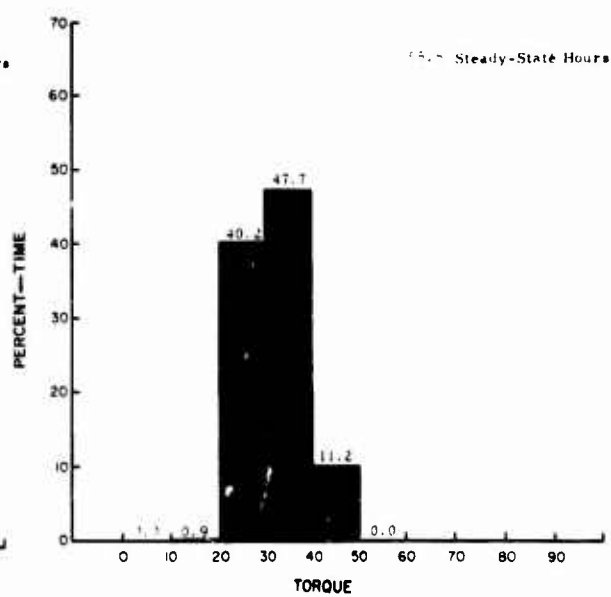
a. Ascent



b. Maneuver

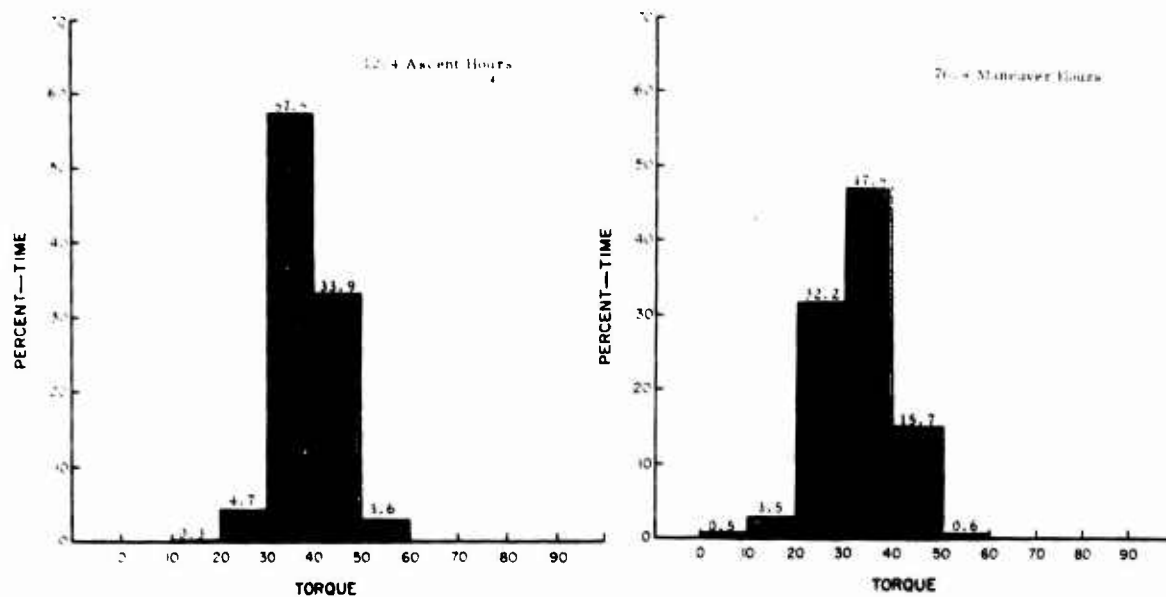


c. Descent



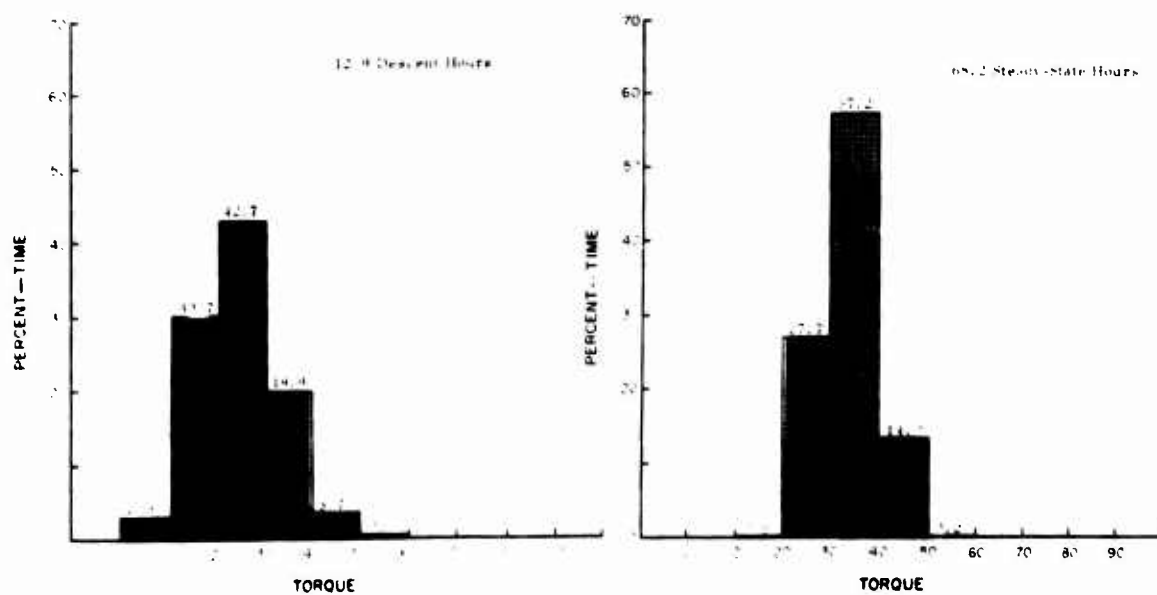
d. Steady State

Figure 17. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Engine Torque Range (Sample I).



a. Ascent

b. Maneuver



c. Descent

d. Steady State

Figure 18. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Engine Torque Range (Sample II).

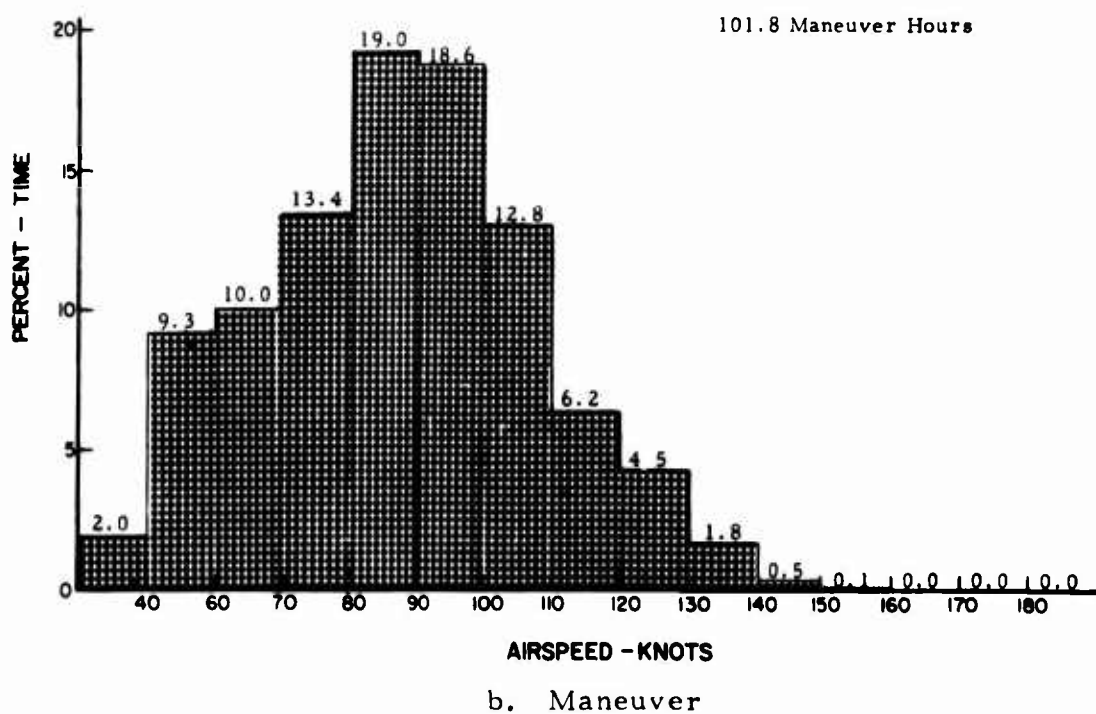
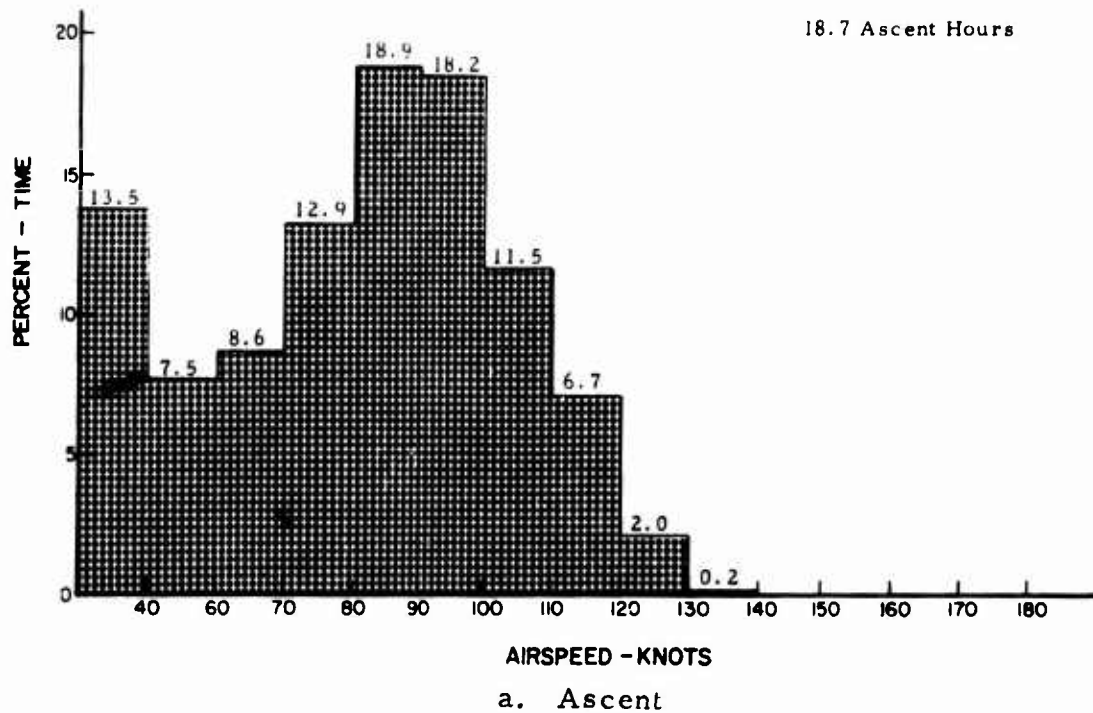
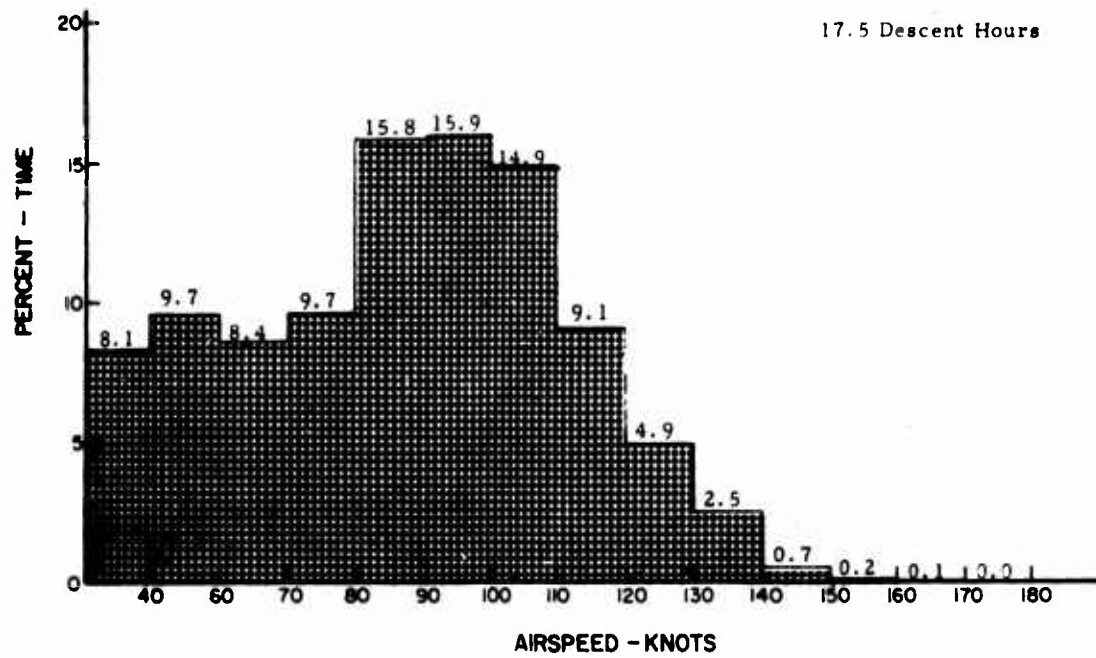
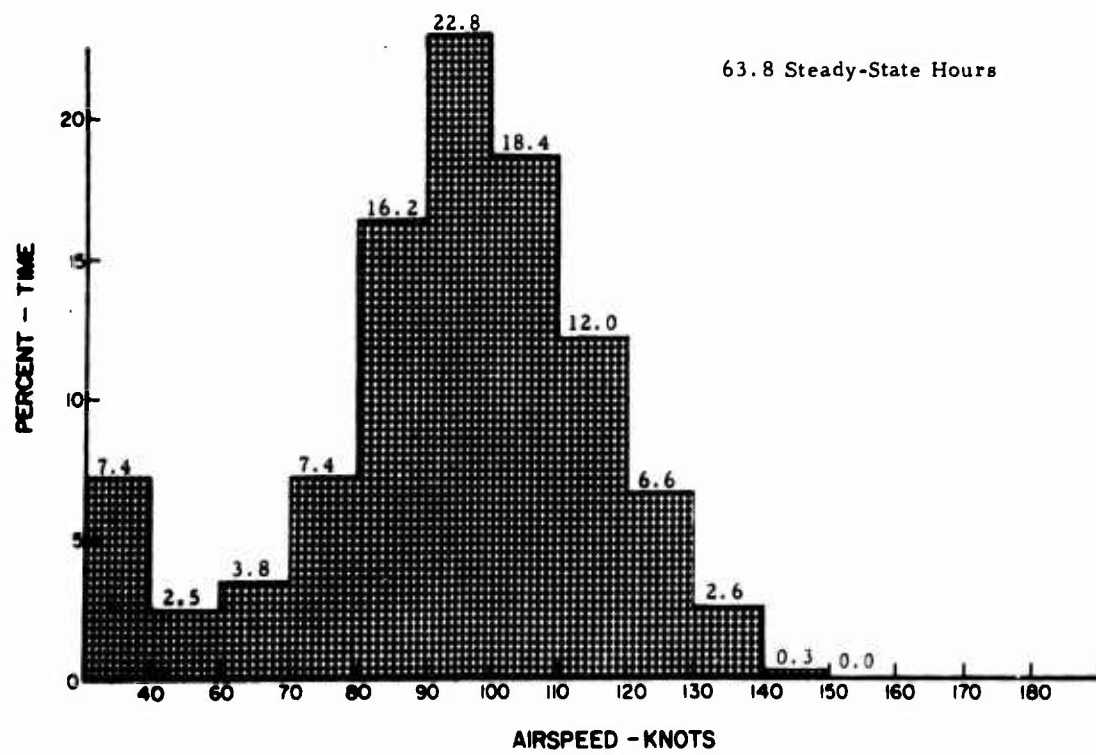


Figure 19. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Airspeed Range (Sample I).

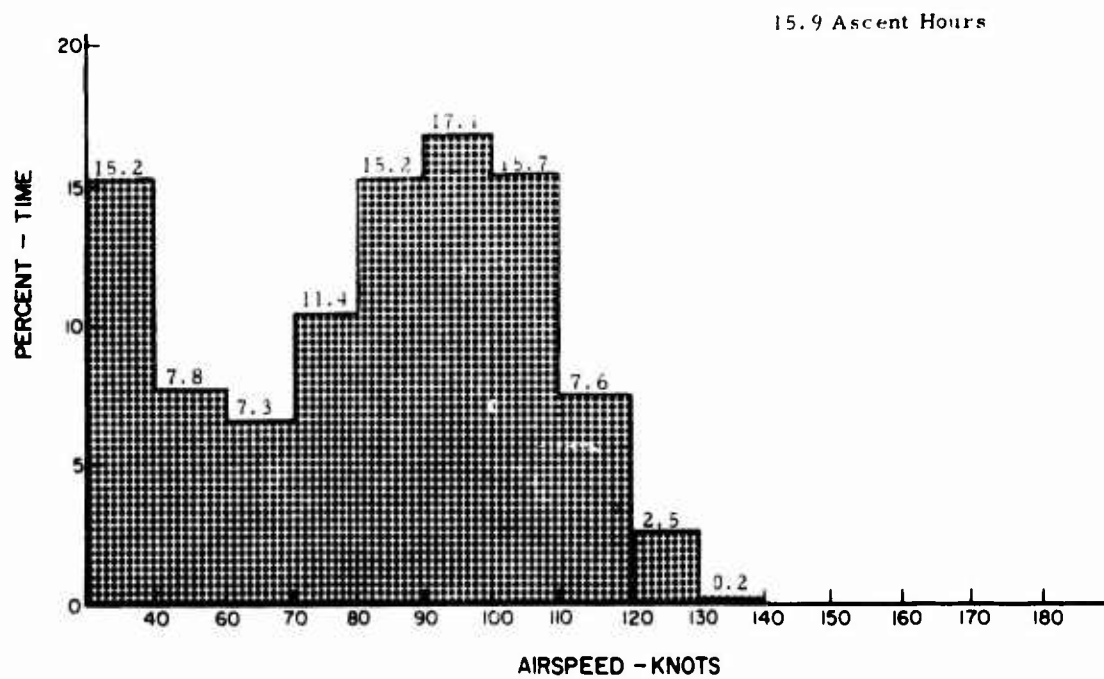


c. Descent

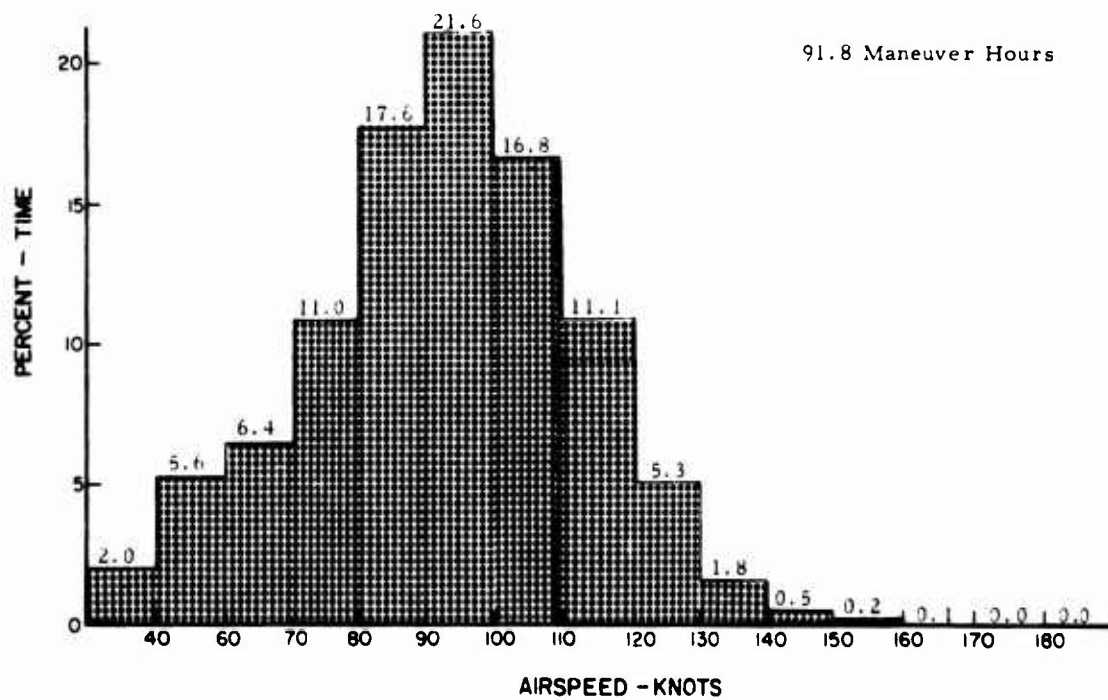


d. Steady State

Figure 19. Concluded.



a. Ascent



b. Maneuver

Figure 20. Flight Time in Each Mission Segment Broken Down by Percentage of Time in Each Airspeed Range (Sample II).

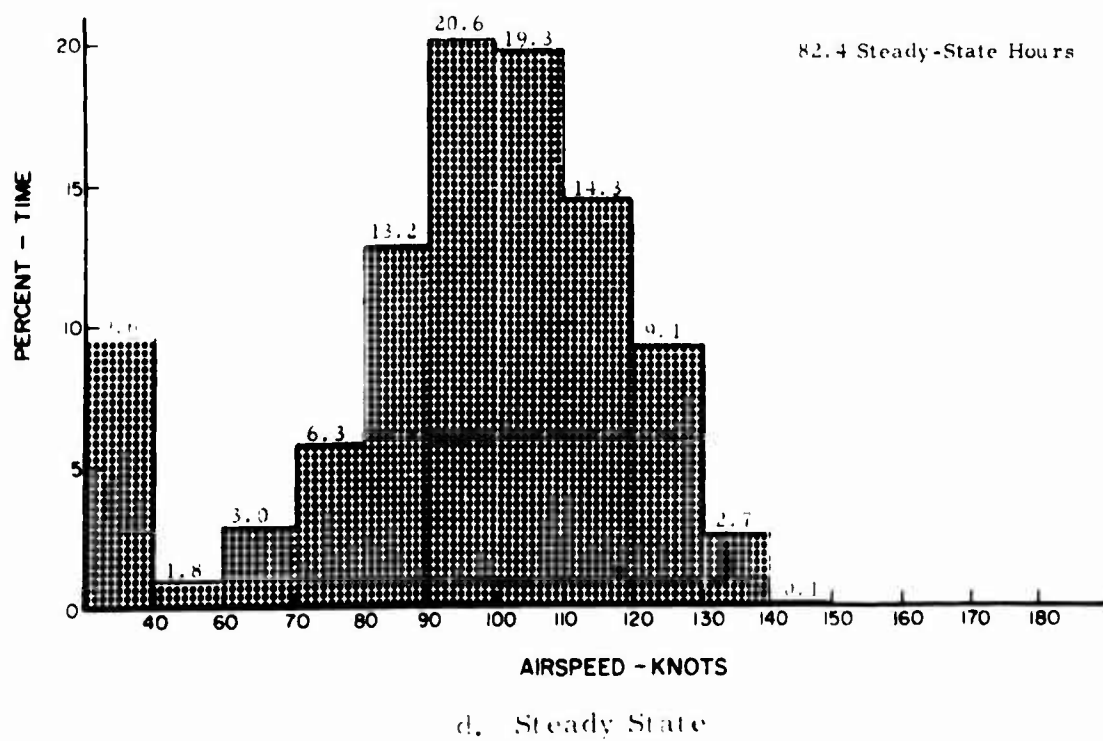
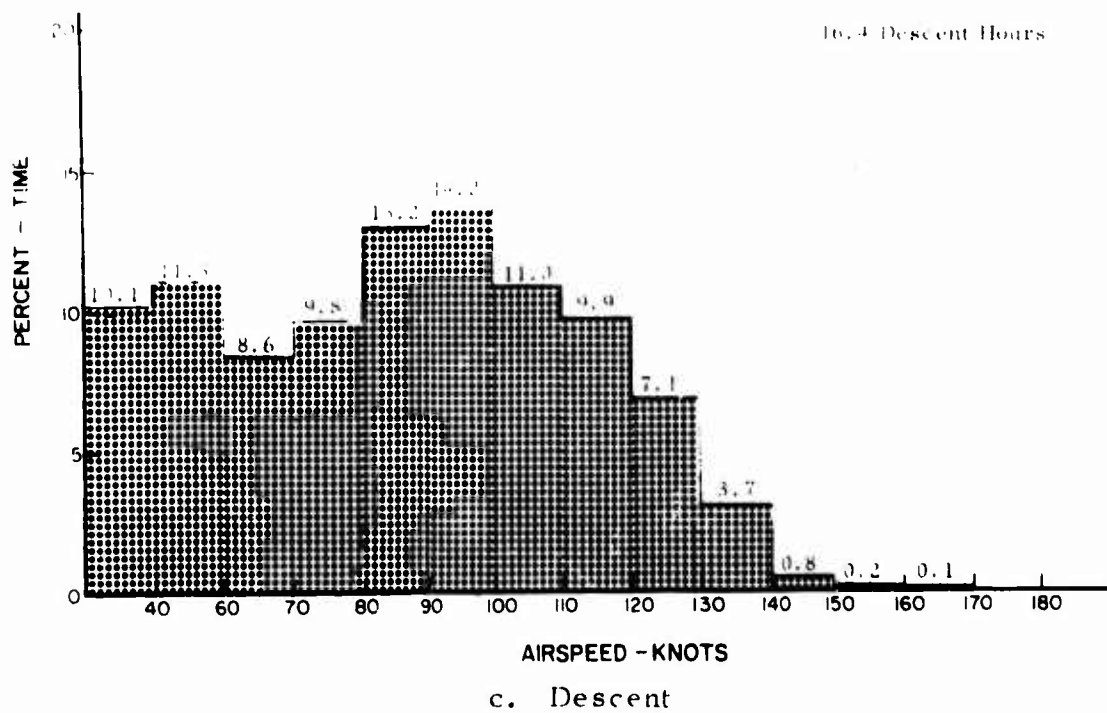


Figure 20. Concluded.

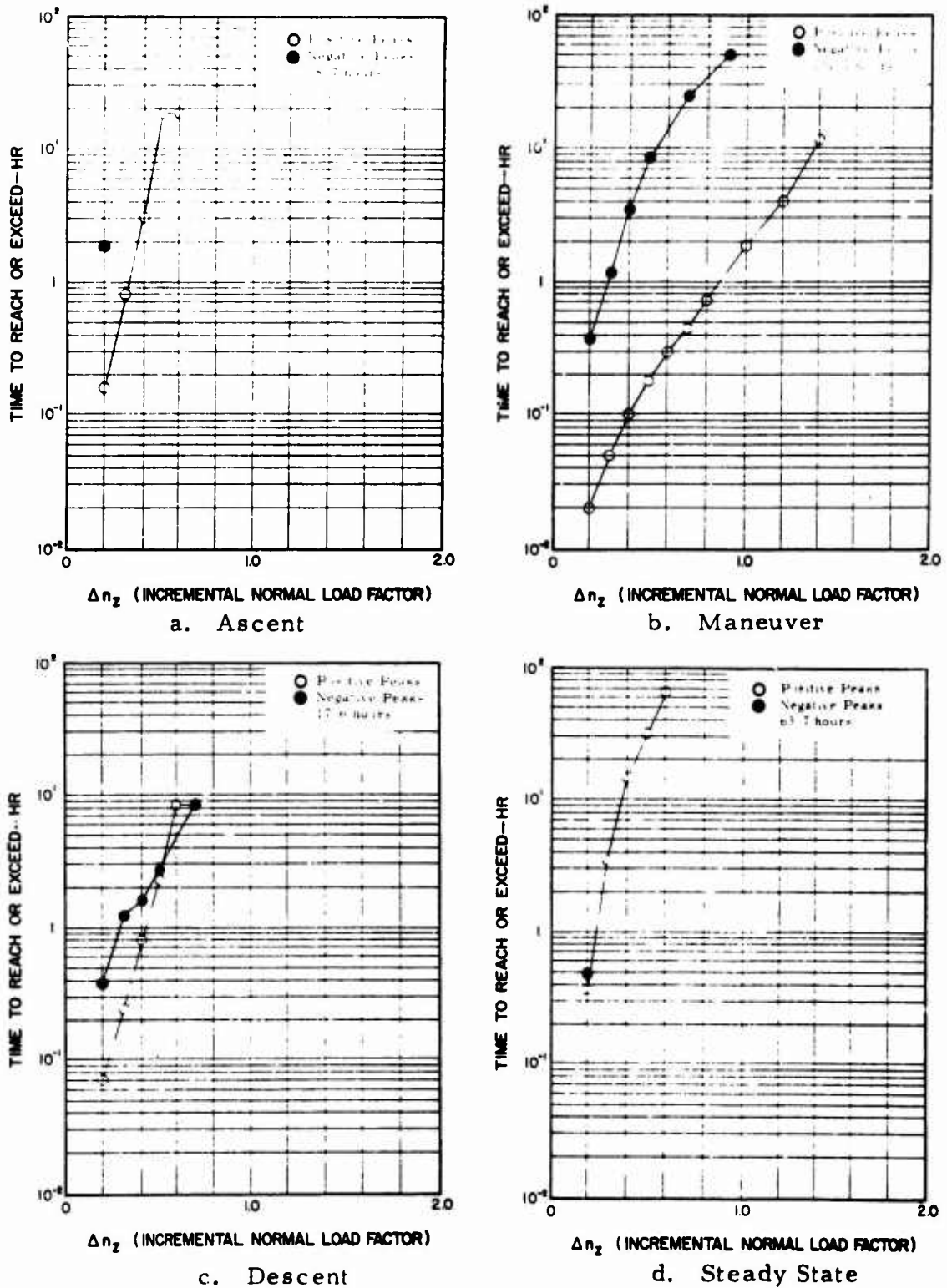
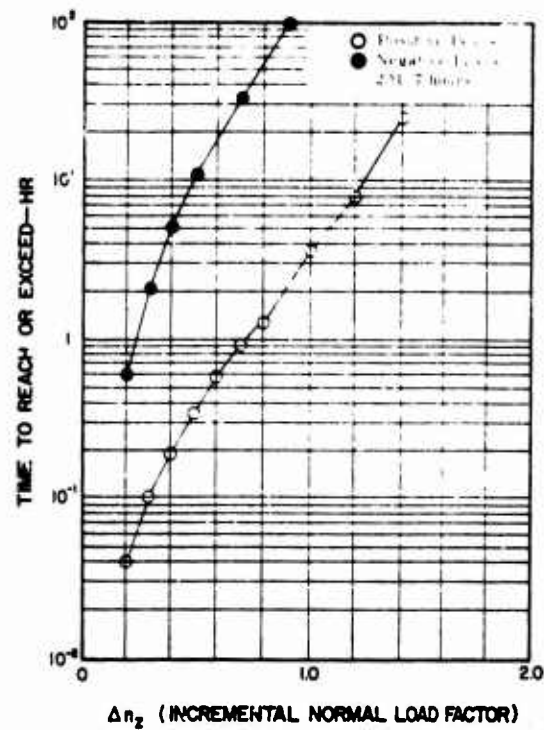
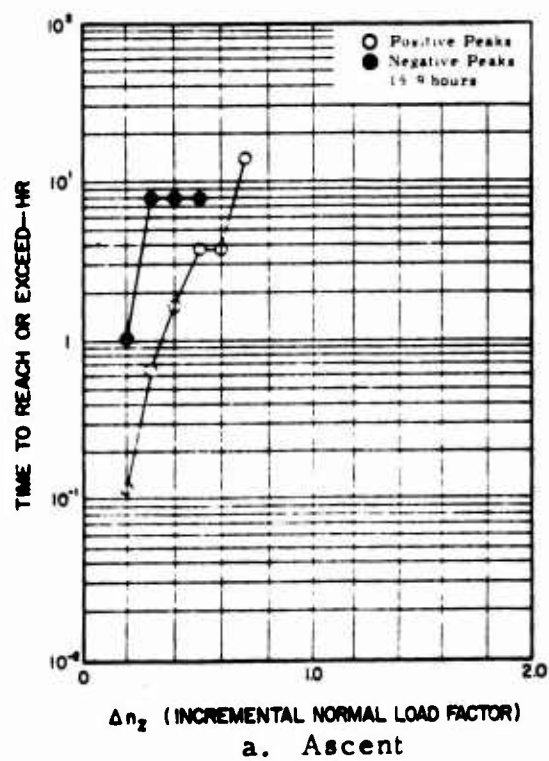


Figure 21. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Mission Segment (Sample I).

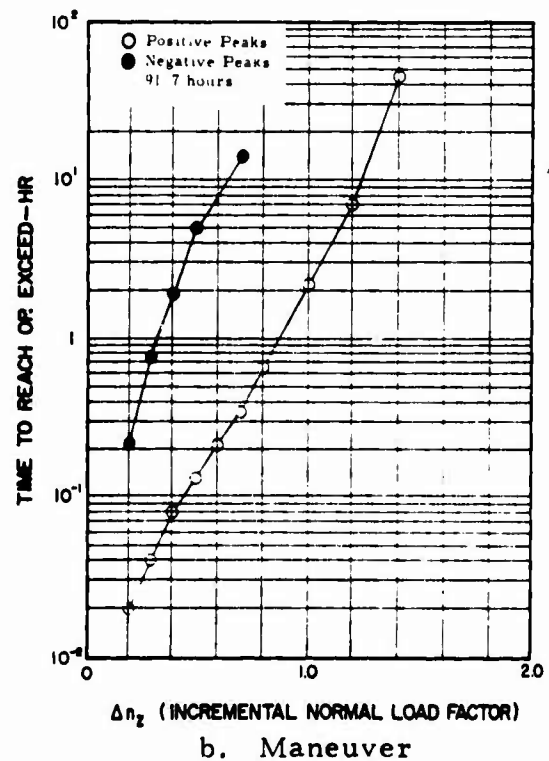


e. Composite

Figure 21. Concluded.

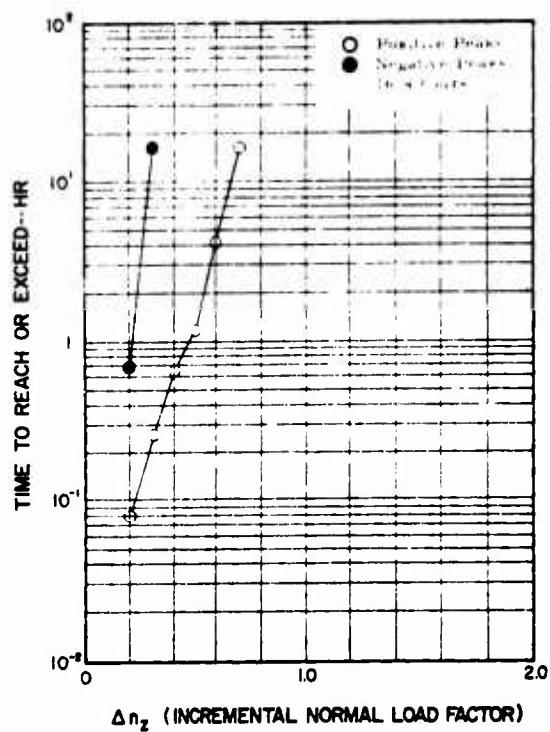


a. Ascent

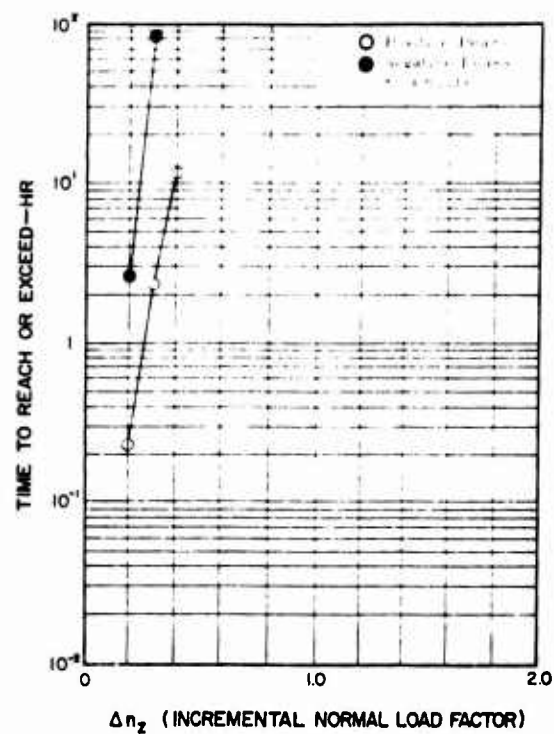


b. Maneuver

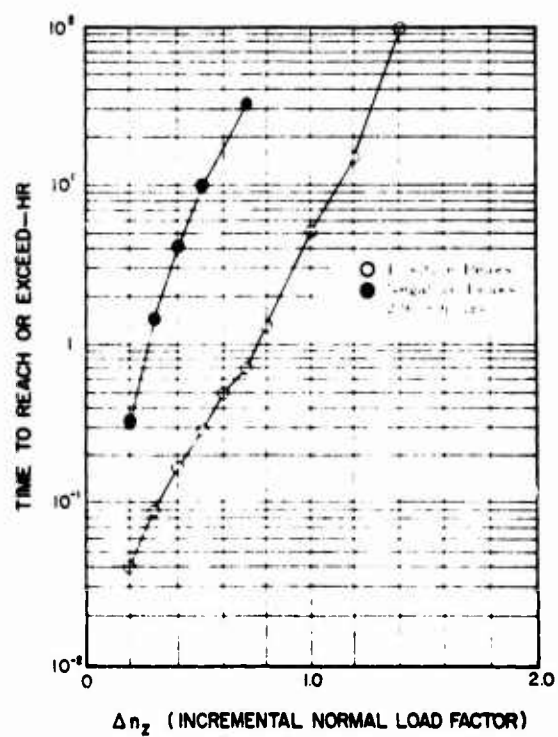
Figure 22. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Mission Segment (Sample II).



c. Descent



d. Steady State



e. Composite

Figure 22. Concluded.

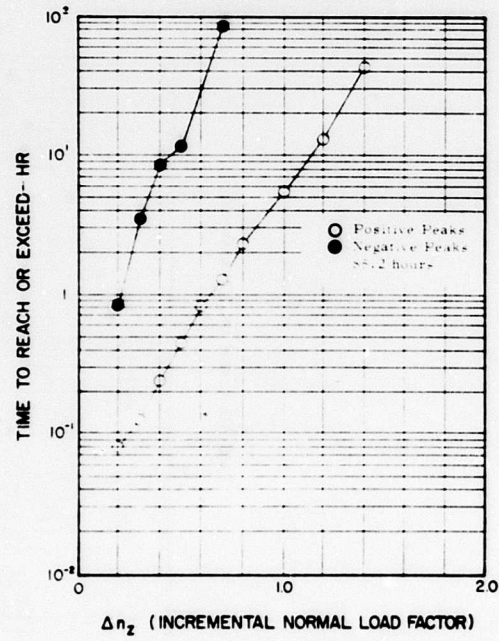
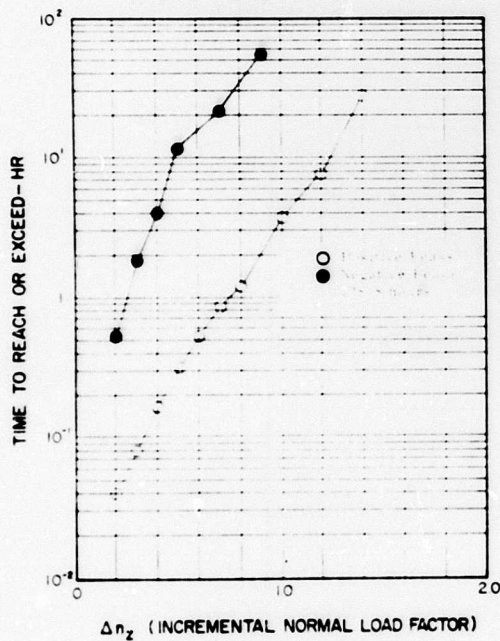
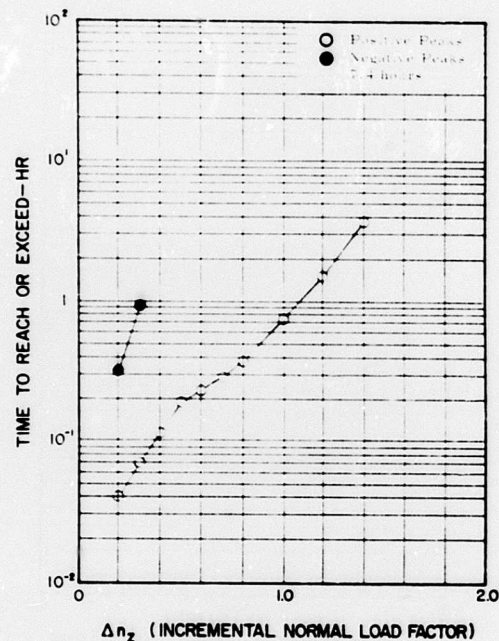
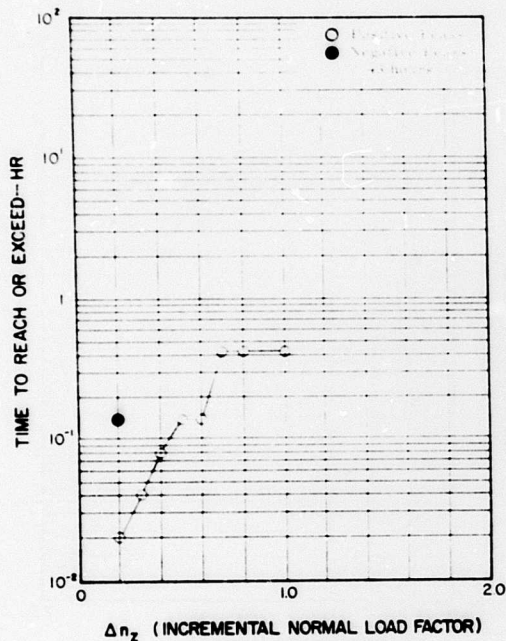
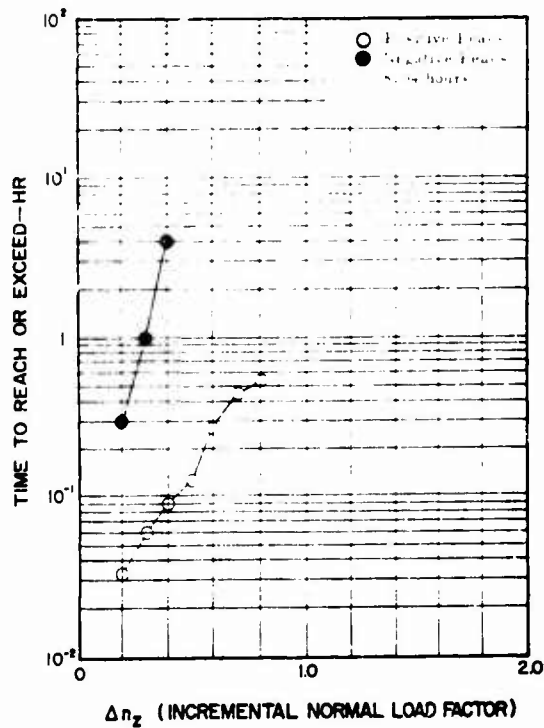
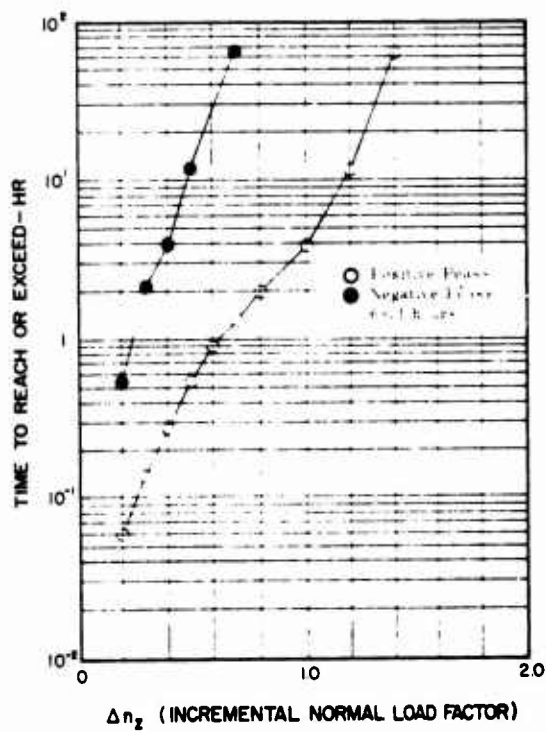


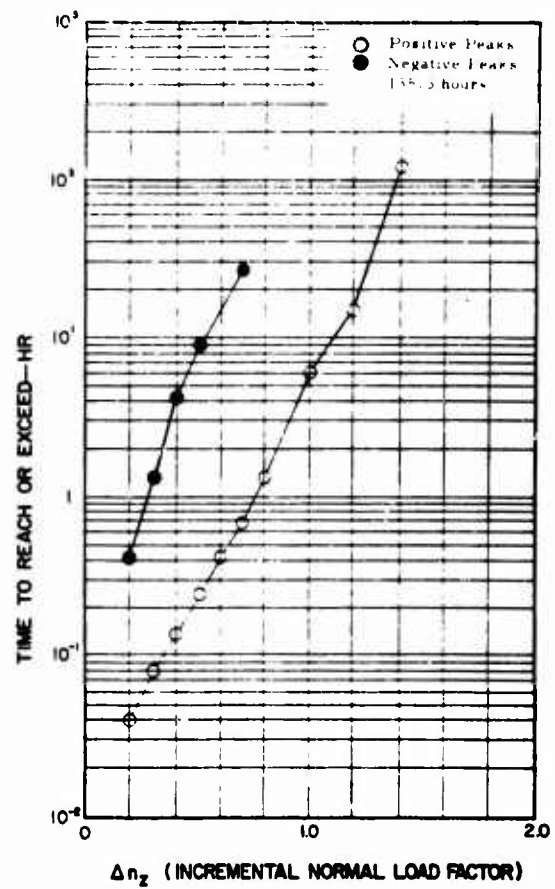
Figure 23. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Gross Weight Ranges (Sample I).



a. 7,000 to 8,000 lb

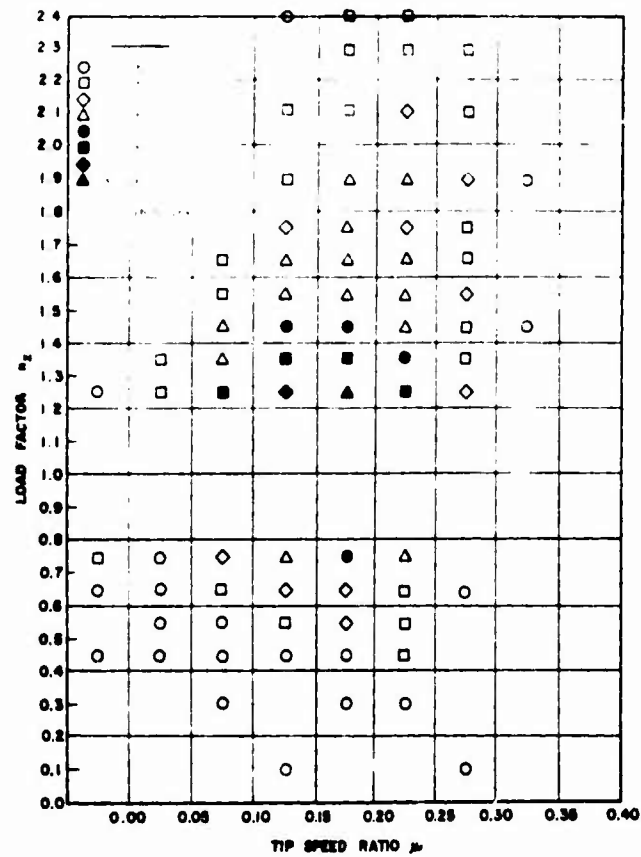


c. Above 9,000 lb



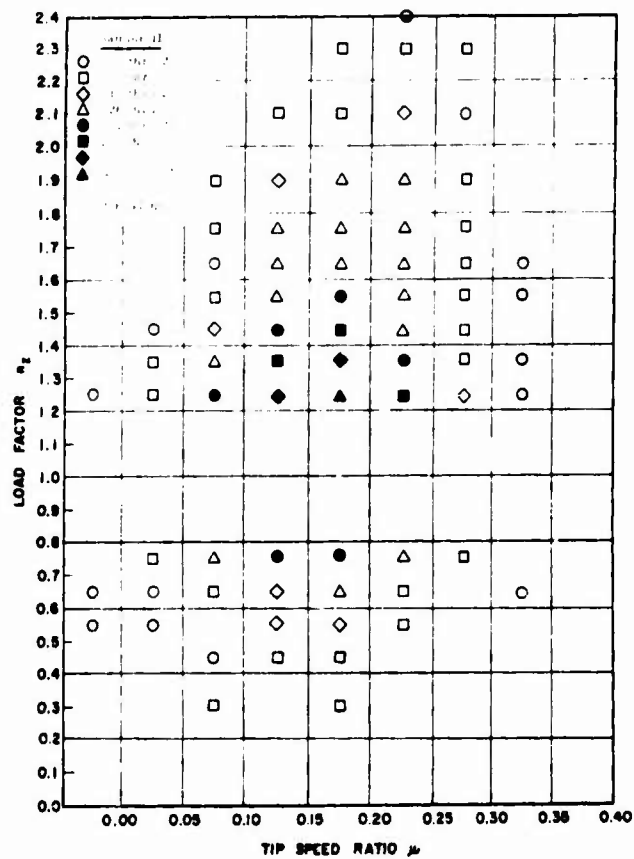
b. 8,000 to 9,000 lb

Figure 24. Exceedance Curves for Incremental Maneuver Normal Load Factor Peaks by Gross Weight Ranges (Sample II).



LOAD FACTOR n_z	TIP SPEED RATIO μ									TOTAL
	< 0.00	0.00 to 0.05	0.05 to 0.10	0.10 to 0.15	0.15 to 0.20	0.20 to 0.25	0.25 to 0.30	0.30 to 0.35	≥ 0.35	
2.2 to 2.4				1	3	4				8
2.0 to 2.2					8	6	3			17
1.8 to 2.0				2	10	11	5			28
1.6 to 1.8				7	36	24	15	1		83
1.4 to 1.6				15	55	24	~			99
1.2 to 1.4			1	31	52	17	4			105
1.0 to 1.2			4	70	97	45	11			227
0.8 to 1.0			23	171	199	79	7	1		480
0.6 to 0.8		2	68	178	187	144	7			576
0.4 to 0.6	1	4	234	846	1169	576	14			2614
0.2 to 0.4										
0.0 to 0.2										
TOTAL	7	11	323	1014	2119	811	71	2		4976

Figure 25. Diagram and Tabulation of Maneuver Normal Load Factor Peaks in Ranges of Rotor Tip Speed Ratio (Sample I).



LOAD FACTOR n_z	TIP SPEED RATIO μ								TOTAL
	< 0.00	0.00 to 0.05	0.05 to 0.10	0.10 to 0.15	0.15 to 0.20	0.20 to 0.25	0.25 to 0.30	0.30 to 0.35	
≥ 2.4									2
2.2 to 2.4									1
2.0 to 2.2						17			27
1.8 to 2.0				12	26				
1.7 to 1.8						4			
1.6 to 1.7				42	61	48		1	9
1.5 to 1.6				56	77	74	6	1	29
1.4 to 1.5			24	153	255	80	5		522
1.3 to 1.4			48	333	636	172	15	1	1198
1.2 to 1.3			16	775	1844	345	18	0	2899
0.8 to 1.2									
0.7 to 0.8				175	175	5			62
0.6 to 0.7					23	8			5
0.5 to 0.6									
0.4 to 0.5									4
0.2 to 0.4									
< 0.2									
TOTAL			1	48	274	584	110	26	3089

Figure 26. Diagram and Tabulation of Maneuver Normal Load Factor Peaks in Ranges of Rotor Tip Speed Ratio (Sample II).

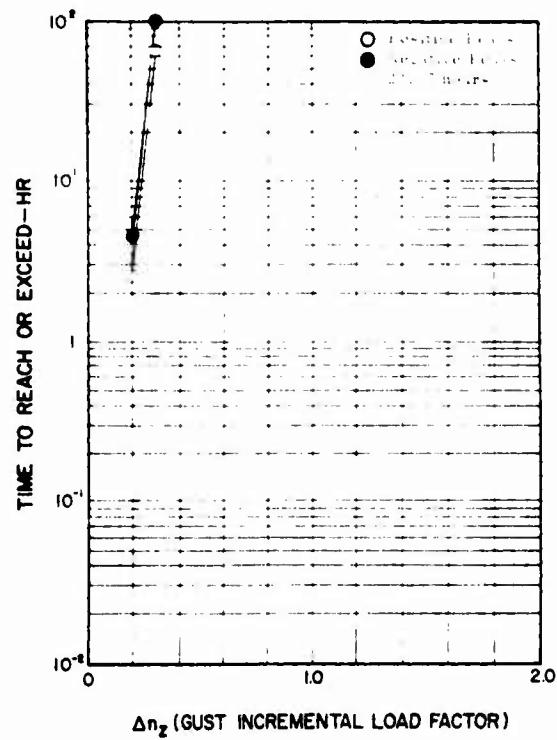


Figure 27. Exceedance Curves for Incremental Gust Normal Load Factor Peaks, Composite (Sample I).

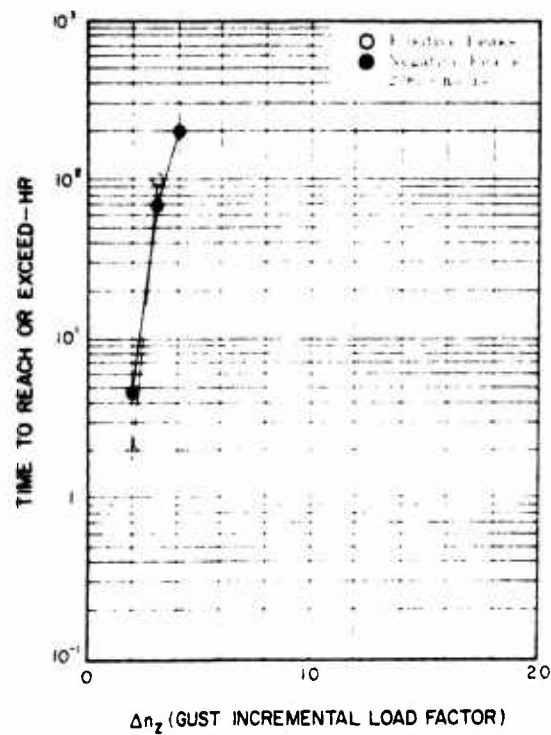


Figure 28. Exceedance Curves for Incremental Gust Normal Load Factor Peaks, Composite (Sample II).

TABLE IV. TIME FOR ALTITUDE VERSUS AIRSPEED BY
WEIGHT AND MISSION SEGMENT, SAMPLE I

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS			0.2				0.2
40			0.2				0.2
60			0.1				0.1
70			0.0				0.0
80			0.0				0.0
90			0.3				0.3
100			0.3				0.3
110							
120							
130							
140							
150							
160							
170							
180							
SUM			1.3				1.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 , BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS			1.2				1.2
40			1.1				1.1
60			0.7				0.7
70			1.6				1.6
80			0.3				0.3
90			0.7				0.7
100			1.6				1.6
110			0.7				0.7
120			0.6				0.6
130			0.5				0.5
140							
150							
160							
170							
180							
SUM			9.0				9.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 , BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		1.1	0.7				1.8
40		0.2	0.1				0.2
60		0.2	0.2				0.3
70		0.1	0.2				0.3
80		0.2	0.4				0.6
90		0.3	0.1				0.4
100		0.3	0.9				1.2
110			1.0				1.0
120			1.2				1.2
130			0.6				0.6
140			2.0				2.0
150			0.4				0.4
160							
170							
180							
SUM		2.3	7.7				10.1

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 , BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		0.1	5.2				5.3
40							
60							
70							
80							
90							
100							
110							
120							
130							
140							
150							
160							
170							
180							
SUM		0.1	5.2				5.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 6000 , BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS		1.2	7.3				8.5
40		0.2	1.5				1.6
60		0.2	1.1				1.2
70		0.1	1.8				1.9
80		0.2	0.7				0.9
90		0.3	1.1				1.4
100		0.3	2.8				3.1
110			1.7				1.7
120			1.8				1.8
130			1.1				1.1
140			2.0				2.0
150			0.4				0.4
160							
170							
180							
SUM		2.4	23.3				25.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.6	2.3	0.9				3.8
40		1.0	1.2				2.2
60		0.6	0.8				1.4
70		1.3	1.2				2.5
90		0.9	2.4				3.3
90		1.2	3.0				4.2
100		2.2	1.4				3.6
110		0.4	1.5				1.9
120			0.6				0.6
130							
140							
150							
160							
170							
180							
SUM	0.6	9.9	13.1				23.6

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. MANUVR							
	LESS	1000	2000	5000	10000	15000	SUM
LESS			0.9				0.9
40		0.2	2.7	0.3	0.3		3.5
60		0.1	5.8	0.9	0.2		7.0
70		2.1	13.0	1.0	0.7		16.8
80		5.1	37.4	2.1	0.7		45.4
90		5.4	47.4	2.6	0.1		55.5
100		1.9	27.5	6.2	0.2		35.7
110		0.1	14.1	5.5	0.5		20.1
120			9.4	1.8	0.3		11.6
130			6.8	1.3	0.1		8.2
140			7.1	0.4			7.4
150			3.9	0.3			4.2
160			0.7	0.5			1.2
170				0.2			0.2
180				0.5			0.5
SUM		15.0	176.7	23.6	3.0		218.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. DESCNT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.9	3.7	3.0				7.5
40	1.0	3.8	1.8				6.7
60	0.5	3.5	1.2				5.2
70	0.1	3.2	2.2				5.4
80	0.1	3.6	3.5				7.1
90	0.0	1.5	5.2				6.7
100	0.0	2.2	8.8				11.1
110	0.1	4.1	1.4				5.7
120	0.1	2.4	2.4				5.0
130			2.4				2.4
140							
150							
160							
170							
180							
SUM	3.0	28.0	31.9				62.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. STEADY							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.4	6.0	20.6				30.0
40			1.4				1.4
60			5.8				5.8
70			11.3				11.3
80		0.4	9.7				10.1
90		2.0	16.1				18.1
100		6.5	28.7	1.6			36.7
110		1.4	6.0	3.6			11.0
120		3.7	3.4	3.1			10.1
130		0.2	2.7	0.1			3.0
140							
150							
160							
170							
180							
SUM	3.4	20.2	105.6	8.4			137.6

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	4.9	12.0	25.4				42.3
40	1.0	5.0	7.2	0.3	0.3		13.9
50	0.5	4.2	13.7	0.9	0.2		19.4
70	0.1	6.6	27.6	1.0	0.7		36.0
80	0.1	10.1	52.9	2.1	0.7		66.0
90	0.0	10.1	71.6	2.6	0.1		84.5
100	0.0	12.7	66.3	7.8	0.2		87.1
110	0.1	6.0	23.1	9.1	0.5		38.8
120	0.1	6.1	15.9	4.9	0.3		27.3
130		0.2	11.9	1.4	0.1		13.6
140			7.1	0.4			7.4
150			3.9	0.3			4.2
160			0.7	0.5			1.2
170				0.2			0.2
180				0.5			0.5
SUM	7.0	73.1	327.2	31.9	3.0		442.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	10.8	15.0	18.3				44.0
40	5.4	12.1	15.5	1.5	0.8		35.3
60	1.6	5.9	17.6	5.2	1.3		31.6
70	1.7	6.3	34.9	1.0			43.9
80	2.5	7.6	48.2	2.1			60.4
90	0.3	11.0	36.0	2.3			49.7
100	0.9	6.2	14.8	1.4			23.3
110	2.2	1.4	11.9	0.1			14.6
120	0.2	1.0	2.6				3.8
130	0.3	0.1	1.8				1.2
140							
150							
160							
170							
180							
SUM	27.8	66.7	199.6	13.7	2.1		307.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. MANOVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS	27.6	38.8	21.9	0.3			88.5
40	29.5	214.7	147.6	0.9			392.9
60	13.8	188.0	228.9	1.7			432.4
70	17.0	179.5	359.3	5.0	0.1		560.8
80	14.2	197.7	510.0	10.0	2.1		734.5
90	5.0	173.2	514.9	11.3			704.4
100	1.1	79.2	392.5	13.7			485.5
110	0.5	29.9	241.0	12.4			282.8
120	0.3	13.3	123.7	1.5			138.8
130	0.2	6.0	52.5	0.8			59.4
140		1.1	11.9	0.2			13.1
150		0.2	3.8	0.1			4.1
160			1.3				1.3
170			0.0				0.0
180							
SUM	119.3	1119.5	2609.3	59.5	2.2		3898.7

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. DESCNT							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	9.2	20.8	22.0				52.1
40	8.6	31.6	25.0				65.2
50	5.4	22.2	25.7				53.3
70	6.5	24.1	29.2				59.8
80	6.3	35.7	60.7				102.7
90	1.8	31.0	69.2	0.1			102.0
100	3.6	21.5	64.4	0.8			90.3
110	0.1	9.6	41.6	2.1			53.3
120	0.2	3.5	22.1	0.1			25.9
130		1.4	9.9				11.3
140			1.3				1.3
150			0.8				0.8
160			0.4				0.4
170			0.1				0.1
180							
SUM	41.7	201.5	372.3	3.1			618.6

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. STEADY							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	21.8	39.2	39.2				110.2
40	3.3	21.3	12.9				37.5
60	4.5	34.0	29.1				67.5
70	4.7	33.7	78.8	3.2			120.4
80	1.2	56.8	202.6	10.6			271.2
90	0.9	70.9	327.3	19.0			418.2
100	4.1	57.8	232.4	23.8			318.2
110	6.5	49.2	147.8	18.7			222.1
120	5.3	15.7	78.6	3.5			103.2
130		7.1	25.5	0.7			33.3
140			1.2				1.2
150							
160							
170							
180							
SUM	62.3	385.7	1175.5	79.7			1703.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. SUM							
	LESS	1000	2000	5000	10000	15000	SUM
LESS	79.4	113.8	101.4	0.3			294.8
40	46.9	279.8	201.0	2.4	0.8		530.9
60	25.3	250.1	301.3	6.9	1.3		584.9
70	29.8	243.6	502.1	9.2	0.1		784.9
80	24.2	297.8	821.5	23.3	2.1		1168.8
90	9.0	286.1	947.4	32.8			1274.4
100	9.7	163.7	704.1	39.8			917.3
110	9.2	99.1	441.2	33.3			572.8
120	6.0	33.6	227.1	5.1			271.8
130	0.5	14.6	88.6	1.5			105.2
140		1.1	14.4	0.2			15.7
150		0.2	4.6	0.1			4.9
160			1.7				1.7
170			0.1				0.1
180							
SUM	239.1	1773.4	4356.6	154.9	4.3		6528.2

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	22.4	44.8	35.9	0.9			104.0
40	8.4	19.5	17.1	1.5			46.5
60	6.1	23.4	32.1	1.8			63.3
70	4.0	29.5	61.2	3.7			98.4
80	4.7	28.3	109.0	6.0			148.0
90	1.4	29.8	116.8	3.4			151.3
100	1.2	19.8	79.2	1.4			100.6
110	0.1	5.1	52.2	0.4			57.9
120		3.0	14.8				17.8
130			0.9				0.9
140							
150							
160							
170							
180							
SUM	48.3	202.2	519.1	19.0			788.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS	19.9	5.1	7.1				32.1
40	42.6	87.6	40.0	0.4			170.6
60	25.5	87.2	67.3	0.6			180.6
70	24.3	83.7	127.0	0.7			235.8
80	35.4	96.0	245.1	1.6			378.2
90	45.7	81.8	243.5	3.4			374.4
100	22.4	49.7	185.9	3.0			261.1
110	3.3	22.1	146.1	2.5			173.9
120	1.4	6.7	110.3	3.1			121.6
130	0.2	4.0	32.1	2.4			38.7
140		1.5	8.2				9.7
150		0.0	1.6				1.6
160			0.5				0.5
170							
180							
SUM	220.8	525.6	1214.8	17.7			1978.9

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	6.1	10.0	7.9				24.0
40	5.0	16.3	9.7				31.0
60	3.9	12.6	12.4	0.9			29.7
70	3.4	15.3	16.6	1.7			37.0
80	2.2	17.6	34.0	3.8			57.5
90	2.9	12.7	39.5	4.3			59.5
100	2.5	8.9	41.7	2.2			55.3
110	0.3	6.1	26.2	3.5			36.1
120		1.9	16.3	1.1			19.3
130		0.2	11.5	0.1			11.9
140		0.1	3.5	0.2			3.8
150			1.0	0.1			1.1
160				0.6			0.6
170							
180							
SUM	26.3	101.7	220.3	18.5			366.9

TABLE IV - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	41.3	55.7	42.2				139.2
40	17.1	29.4	8.8				55.3
60	8.1	36.8	25.7				70.6
70	5.8	67.8	76.5	0.2			150.4
80	8.6	113.4	215.5	2.6			340.1
90	13.4	106.5	312.3	4.5			436.7
100	16.7	56.7	265.1	8.5			346.9
110	7.3	29.6	179.9	7.3			224.1
120	2.3	16.1	116.6	5.1			140.0
130	1.6	2.6	57.6	0.5			62.3
140		0.7	8.7				9.3
150		0.3					0.3
160							
170							
180							
SUM	122.1	515.4	1308.8	28.7			1975.1

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	89.7	115.6	93.1	0.9			299.3
40	73.1	152.8	75.7	1.9			303.4
60	43.6	167.0	137.4	3.2			344.2
70	37.6	196.3	281.3	6.4			521.6
80	50.9	255.3	603.6	14.0			923.7
90	63.4	230.8	712.1	15.6			1021.9
100	42.8	134.1	571.9	15.1			763.9
110	11.0	62.9	404.3	13.7			492.0
120	3.7	27.7	258.0	9.3			298.7
130	1.8	6.8	172.2	3.0			113.8
140		2.3	20.4	0.2			22.9
150		0.3	2.6	0.1			3.0
160			0.5	0.6			1.1
170							
180							
SUM	417.5	1345.0	3263.1	84.0			5109.6

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT SUM, BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	174.0	242.6	227.2	1.2			644.9
40	121.0	437.7	285.2	4.7	1.1		849.8
60	69.3	414.4	453.5	10.9	1.5		949.6
70	67.5	446.6	812.9	16.6	0.8		1344.3
80	75.2	503.4	1478.7	39.4	2.8		2159.5
90	71.5	527.4	1732.3	51.0	0.1		2382.2
100	52.5	310.8	1345.1	62.7	0.2		1771.4
110	20.4	159.1	870.2	56.1	0.5		1105.3
120	9.9	67.3	502.8	19.4	0.3		599.6
130	2.3	21.6	203.8	5.9	0.1		233.7
140		3.3	44.0	0.7			48.0
150		0.5	11.5	0.5			12.5
160			2.9	1.1			4.0
170			0.1	0.2			0.4
180				0.5			0.5
SUM	663.6	3193.9	7970.2	270.8	7.3		12105.7

TABLE V. TIME FOR CYCLIC STEADY VERSUS COLLECTIVE
STEADY BY MISSION SEGMENT, SAMPLE 1

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. ASCENT											
LESS	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											
30							52.9				52.8
40						1062.1	6.4				1068.6
50											
60											
70											
80											
90											
LESS						1062.1	59.3				1121.4
MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. MANUVR											
LESS	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											
30							86.2				86.2
40						5871.0	147.3				6018.3
50											
60											
70											
80											
90											
LESS						5871.0	233.5				6124.4
MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. DESCNT											
LESS	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											
30							48.8				48.8
40						1001.2	8.4				1009.6
50											
60											
70											
80											
90											
LESS						1001.2	57.1				1058.3
MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. STADY											
LESS	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10		0.9	1.9				1.9				4.7
20			2.4	1.1	0.4	2.0	0.1				3.4
30				18.6	99.4	76.5	2.4				199.3
40		0.6	122.1	797.9	698.5	127.9	26.8	1.7			1775.5
50	5.3	15.0	420.5	793.9	210.3	98.4	35.3	10.1			1690.6
60	6.4	39.4	128.6	52.3	10.3	7.3	1.6				245.0
70		0.2			1.5						1.7
80											
90											
LESS	12.4	56.1	571.4	1652.8	1021.1	312.2	58.0	11.8			3421.1

TABLE V - Continued

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG.											SUM
LESS	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS		0.9	1.9				1.9				4.7
10			0.4	0.1	0.4	2.0	0.1				3.0
20			2.9	18.6	99.4	76.5	2.4				199.8
30		0.6	122.1	797.9	698.5	127.9	214.5	1.7			1963.2
40	6.3	25.0	420.5	783.9	210.9	8032.7	197.4	10.1			9686.9
50	4.4	39.4	128.6	52.3	10.3	7.3	1.6				245.9
60		0.2			1.5						1.7
70											
80											
90											
LESS	12.8	66.1	676.4	1652.8	1021.1	8246.5	417.9	11.8			12105.3

TABLE VI. TIME FOR C_T/α VERSUS μ BY RATE OF CLIMB AND MISSION SEGMENT, SAMPLE I

MINUTES FOR C_T/S VS μ BY RATE OF CLIMB						LESS, BY MISSION SEG. ASCENT
LESS	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05		0.1				0.1
0.10						
0.15						
0.20						
0.25						
0.30						
0.35						
SUM		0.1				0.1

MINUTES FOR C_T/S VS μ BY RATE OF CLIMB						LESS, BY MISSION SEG. MANUVR
LESS	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.1	0.2				0.3
0.0		0.3				0.3
0.05		2.8				2.8
0.10	0.1	13.6				13.7
0.15	0.1	30.5	0.0			30.7
0.20	0.0	22.9				22.9
0.25		5.8	0.1			5.8
0.30		0.6				0.6
0.35						
SUM	0.4	76.6	0.1			77.1

MINUTES FOR C_T/S VS μ BY RATE OF CLIMB						LESS, BY MISSION SEG. DESCNT
LESS	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.2				0.2
0.05		0.4				0.4
0.10		0.7				0.7
0.15		1.8				1.8
0.20		0.7				0.7
0.25		0.1				0.1
0.30						
0.35						
SUM		3.9				3.9

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				LESS, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS	0.1	0.2					0.3
0.0		0.5					0.5
0.05		3.3					3.3
0.10	0.1	14.3					14.4
0.15	0.1	32.3	0.0				32.5
0.20	0.0	23.6					23.6
0.25		5.9	0.1				5.9
0.30		0.6					0.6
0.35							
SUM	0.4	80.6	0.1				81.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-2100, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS							
0.0							
0.05		0.8					0.8
0.10		7.6					7.6
0.15		8.3					8.3
0.20		4.6					4.6
0.25		0.8					0.8
0.30							
0.35							
SUM		22.1					22.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-2100, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS							
0.0		0.1					0.1
0.05		0.4					0.4
0.10		1.0					1.0
0.15		1.5					1.5
0.20		1.3					1.3
0.25		0.3					0.3
0.30							
0.35							
SUM		4.6					4.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-2100, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS							
0.0							
0.05							
0.10							
0.15							
0.20		0.2					0.2
0.25							
0.30							
0.35							
SUM		0.2					0.2

TABLE VI - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -2100, BY MISSION SEG. SUM						
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.1				0.1	
0.05	1.2				1.2	
0.10	8.6				8.6	
0.15	9.8				9.8	
0.20	6.1				6.1	
0.25	1.1				1.1	
0.30						
0.35						
SUM	26.9				26.9	

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. MANUVR						
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.1				0.1	
0.05	0.3				0.3	
0.10	6.2				6.2	
0.15	0.1	21.3	0.1		21.5	
0.20	0.3	26.9	0.1		27.3	
0.25	0.1	11.6			11.7	
0.30		1.9			1.9	
0.35		0.0			0.0	
SUM	0.5	68.3	0.3		69.1	

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. DESCNT						
LESS	0.06	0.09	0.12	0.15	SUM	
0.0						
0.05		1.8			1.8	
0.10		1.2			1.2	
0.15	0.1	3.4			3.5	
0.20		3.0			3.0	
0.25		0.6			0.6	
0.30						
0.35						
SUM	0.1	9.9			10.0	

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. STEADY						
LESS	0.06	0.09	0.12	0.15	SUM	
0.0						
0.05		0.1			0.1	
0.10		0.4			0.4	
0.15		0.4			0.4	
0.20						
0.25						
0.30						
0.35						
SUM		0.9			0.9	

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1800, BY MISSION SEG.				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.1				0.1
0.0		0.3				0.3
0.05		0.1				0.1
0.10	0.1	22.9	0.1			23.2
0.15	0.3	30.7	0.1			31.2
0.20	0.1	14.6				14.7
0.25		2.4				2.4
0.30		0.0				0.0
0.35						
SUM	0.5	79.2	0.3			80.0

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG. MANUVR				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.5				0.5
0.0		3.1				3.1
0.05		13.8	1.0			14.8
0.10		21.9	1.0			22.8
0.15		8.0				8.0
0.20		0.9				0.9
0.25						
0.30						
0.35						
SUM		48.1	2.0			50.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG. DESCNT				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		0.4				0.4
0.05		0.8				0.8
0.10	0.1	2.0	0.1			2.2
0.15		8.4				8.4
0.20	0.1	6.1				6.2
0.25		1.1				1.1
0.30						
0.35						
SUM	0.2	19.1	0.1			19.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG. STEADY				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0						
0.05		0.9				0.9
0.10		2.5				2.5
0.15		0.8				0.8
0.20						
0.25						
0.30						
0.35						
SUM		4.3				4.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. SUM						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		1.1				1.1
0.05		3.9				3.9
0.10	0.1	16.6	1.1			17.9
0.15		32.8	1.0			33.7
0.20	0.1	15.0				15.1
0.25		2.0				2.0
0.30						
0.35						
SUM	0.2	71.6	2.1			73.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. ASCENT						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10						
0.15		1.1				1.1
0.20		0.4				0.4
0.25						
0.30						
0.35						
SUM		1.5				1.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. MANUVR						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		2.4				2.4
0.05	0.0	16.1				16.2
0.10	0.4	54.9	0.1			55.4
0.15	0.2	35.9				36.1
0.20	0.2	24.6				24.8
0.25		2.3				2.3
0.30						
0.35						
SUM	0.9	138.5	0.1			139.5

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1200, BY MISSION SEG. DESCNT						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.5				0.5
0.0	0.1	1.4				1.5
0.05	0.1	4.5				4.6
0.10		8.8	0.8			9.6
0.15	0.1	19.6				19.7
0.20		8.3				8.3
0.25	0.1	0.4				0.5
0.30						
0.35						
SUM	0.4	43.5	0.8			44.7

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB -1200, BY MISSION SEG. STEADY			
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		1.9				1.9
0.0		0.3				0.3
0.05		0.2				0.2
0.10		3.9				3.9
0.15		10.3				10.3
0.20		4.2				4.2
0.25						
0.30						
0.35						
SUM		20.8				20.8

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG.				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		2.8				2.8
0.0	0.1	4.2				4.3
0.05	0.2	20.9				21.0
0.10	0.4	67.6	0.9			68.9
0.15	0.3	116.8				117.1
0.20	0.2	39.5				39.7
0.25	0.1	2.6				2.7
0.30						
0.35						
SUM	1.3	254.3	0.9			256.5

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-900, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10		0.8				0.8
0.15		3.0				3.0
0.20		0.4				0.4
0.25						
0.30						
0.35						
SUM		4.2				4.2

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-900, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.1				0.1
0.0		0.6				0.6
0.05		10.3				10.3
0.10		52.7				52.7
0.15	0.8	89.2				90.0
0.20		31.4				31.4
0.25		2.7				2.7
0.30						
0.35						
SUM	0.8	186.9				187.8

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.7				0.7
0.0		0.3				0.3
0.05		1.1				1.1
0.10		5.9				5.9
0.15		26.2				26.2
0.20		12.1				12.1
0.25						
0.30						
0.35						
SUM		46.4				46.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. DESCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.4				0.4
0.0		0.7				0.7
0.05		3.7				3.7
0.10		20.6				20.6
0.15	0.2	49.9				50.1
0.20	0.1	15.6				15.7
0.25	0.4	0.9				1.3
0.30						
0.35						
SUM	0.7	91.7				92.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		1.2					1.2
0.0		1.6					1.6
0.05		15.1					15.1
0.10		80.0					80.0
0.15	1.0	168.3					169.3
0.20	0.1	59.6					59.7
0.25	0.4	3.5					4.0
0.30							
0.35							
SUM	1.5	329.3					330.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		1.2	0.1			1.3
0.0		2.2				2.2
0.05		0.9				0.9
0.10		5.2				5.2
0.15		14.4				14.4
0.20		2.2				2.2
0.25						
0.30						
0.35						
SUM		26.0	0.1			26.1

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-600, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.1	0.4				0.5
0.0		3.9				3.9
0.05	0.2	54.7				54.9
0.10	0.5	233.0	0.1			233.6
0.15	0.5	296.7	1.0			298.2
0.20	0.3	72.6				72.9
0.25		3.3				3.3
0.30						
0.35						
SUM	1.6	664.5	1.1			667.2

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-600, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		2.7				2.7
0.0	0.5	7.7	0.0			8.2
0.05	0.9	28.7	0.1			29.8
0.10	0.7	86.9	0.1			87.7
0.15	0.1	122.8				122.9
0.20	0.8	35.0				35.8
0.25	0.3	0.3				0.6
0.30						
0.35						
SUM	3.3	284.1	0.3			287.7

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-600, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		5.6				5.6
0.0	0.1	1.7				1.8
0.05		4.5				4.5
0.10		60.9				60.9
0.15		136.9				136.9
0.20		39.7	2.2			42.0
0.25						
0.30						
0.35						
SUM	0.1	249.3	2.2			251.7

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-600, BY MISSION SEG. SUM	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.1	9.9	0.1			10.1
0.0	0.6	15.5	0.0			16.1
0.05	1.1	88.7	0.1			90.0
0.10	1.2	385.9	0.2			387.4
0.15	0.6	570.8	1.0			572.4
0.20	1.1	149.5	2.2			152.9
0.25	0.3	3.6				3.9
0.30						
0.35						
SUM	5.0	1224.0	3.7			1232.7

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-300, BY MISSION SEG. ASCENT	
	LESS	1.06	0.09	0.12	0.15	SUM
LESS	0.1	29.0				29.1
0.0		27.0				27.0
0.05		25.9	0.1			26.0
0.10	0.1	157.3	0.9			158.3
0.15		208.0				208.0
0.20		25.1				25.1
0.25						
0.30						
0.35						
SUM	0.2	472.2	1.0			473.4

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-300, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.3	2.1				2.4
0.0	0.1	17.5				17.6
0.05	0.1	384.3				384.4
0.10	4.3	1411.0				1415.4
0.15	3.2	1421.1				1424.3
0.20	0.3	252.1				252.4
0.25		2.9				2.9
0.30						
0.35						
SUM	8.3	3491.0				3499.3

MINUTES FOR CT/S VS MU				BY RATE OF CLIMB		-300, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.7	8.5				9.2
0.0	0.5	26.5	0.3			27.3
0.05	1.5	78.4				79.9
0.10	2.0	180.1				182.1
0.15	2.2	213.7				215.8
0.20	0.6	36.8				37.4
0.25	0.1	0.5				0.6
0.30						
0.35						
SUM	7.6	544.5	0.3			552.4

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		-300, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	5.0	126.9				131.9
0.0	0.7	113.0				113.7
0.05		71.3				71.3
0.10		709.9				709.9
0.15		1736.7	0.9			1737.6
0.20		411.6	2.5			404.1
0.25		0.4				0.4
0.30						
0.35						
SUM	5.8	3159.7	3.4			3168.9

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-300, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS	6.1	166.5					172.6
0.0	1.3	183.9	0.3				185.6
0.05	1.6	559.9	0.1				561.6
0.10	6.4	2458.3	0.9				2465.7
0.15	5.3	3579.4	0.9				3585.7
0.20	0.9	715.6	2.5				719.0
0.25	0.1	3.8					3.9
0.30							
0.35							
SUM	21.8	7667.5	4.7				7694.0

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.0	21.3				21.3
0.0		29.5	0.2			29.7
0.05	0.0	41.5	0.2			41.7
0.10		149.1	0.1			149.2
0.15	0.4	146.8				147.2
0.20		16.6				16.6
0.25						
0.30						
0.35						
SUM	0.5	404.8	0.5			405.7

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.1	0.5				0.6
0.0		4.3				4.3
0.05	0.2	53.1				53.4
0.10	1.8	284.0	0.1			285.8
0.15	1.2	337.6				338.7
0.20	0.1	71.0				71.1
0.25		1.6				1.6
0.30						
0.35						
SUM	3.4	752.0	0.1			755.5

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.1	1.0				1.1
0.0		3.3				3.3
0.05		4.7	0.1			4.8
0.10		10.2				10.2
0.15	0.1	12.5				12.6
0.20		3.8				3.8
0.25						
0.30						
0.35						
SUM	0.2	35.6	0.1			35.9

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.2	5.3				5.4
0.0		7.3				7.3
0.05		4.3				4.3
0.10		57.1				57.1
0.15		137.3				137.3
0.20		38.3				38.3
0.25						
0.30						
0.35						
SUM	0.2	249.5				249.7

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS	0.4	28.0				28.5
0.0		44.4	0.2			44.6
0.05	0.3	113.6	0.3			104.2
0.10	1.8	500.3	0.2			502.3
0.15	1.7	634.2				635.9
0.20	0.1	129.7				129.8
0.25		1.6				1.6
0.30						
0.35						
SUM	4.3	1441.9	0.7			1446.9

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			600, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		3.5				3.5
0.0		6.7	0.2			6.9
0.05		18.4	0.5			18.9
0.10		57.5	2.6			60.1
0.15		35.7				35.7
0.20		3.0				3.0
0.25						
0.30						
0.35						
SUM		124.9	3.3			128.1

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			600, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		1.0				1.0
0.05		12.9				12.9
0.10		81.5				81.5
0.15		100.4				100.4
0.20		25.2				25.2
0.25		1.2				1.2
0.30						
0.35						
SUM		222.3				222.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. DESCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.1				0.1
0.0		0.2				0.2
0.05		0.9				0.9
0.10		0.9				0.9
0.15		2.4				2.4
0.20		0.2				0.2
0.25		0.1				0.1
0.30						
0.35						
SUM		4.7				4.7

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		1.0				1.0
0.05		0.2				0.2
0.10		10.8				10.8
0.15		26.2				26.2
0.20		6.9				6.9
0.25						
0.30						
0.35						
SUM		45.4				45.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		3.9				3.9
0.0		8.9	0.2			9.1
0.05		32.3	0.5			32.8
0.10		150.7	2.6			153.3
0.15		164.6				164.6
0.20		35.4				35.4
0.25		1.3				1.3
0.30						
0.35						
SUM		397.3	3.3			400.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		1.2				1.2
0.0		0.6				0.6
0.05	0.1	9.4	0.5			10.0
0.10	0.0	25.1	2.1			27.2
0.15	0.2	17.6				17.8
0.20		1.5				1.5
0.25						
0.30						
0.35						
SUM	0.4	55.3	2.6			58.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.1				0.1
0.0	0.1	0.8				1.0
0.05	0.1	14.4				14.5
0.10	0.2	71.3				71.5
0.15	0.3	88.6	0.1			89.0
0.20	0.1	15.7				15.9
0.25		0.5				0.5
0.30						
0.35						
SUM	1.0	191.4	0.1			192.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		0.2				0.2
0.05		0.2				0.2
0.10		0.2				0.2
0.15		0.7				0.7
0.20		0.2				0.2
0.25						
0.30						
0.35						
SUM		1.9				1.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		1.3				1.3
0.0		0.3				0.3
0.05		0.7				0.7
0.10		5.3				5.3
0.15		14.9				14.9
0.20		4.1				4.1
0.25						
0.30						
0.35						
SUM		26.6				26.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		2.9					2.9
0.0	0.1	1.9					2.1
0.05	0.3	24.7	0.5				25.5
0.10	0.3	101.9	2.1				104.3
0.15	0.5	121.8	0.1				122.4
0.20	0.1	21.5					21.6
0.25		0.5					0.5
0.30							
0.35							
SUM	1.4	275.2	2.7				279.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1200, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0		0.1				0.1
0.05		1.0				1.0
0.10		5.2	0.2			5.4
0.15		1.1				1.1
0.20		0.5				0.5
0.25						
0.30						
0.35						
SUM		8.1	0.2			8.3

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1200, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.3				0.3
0.0		2.5				2.5
0.05		19.9				19.9
0.10		25.9				25.9
0.15		3.9				3.9
0.20		0.1				0.1
0.25						
0.30						
0.35						
SUM		52.6				52.6

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1200, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10						
0.15		0.2				0.2
0.20						
0.25						
0.30						
0.35						
SUM		0.2				0.2

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1200, BY MISSION SEG. STEADY	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.1				0.1
0.05						
0.10		0.4				0.4
0.15		3.1				3.1
0.20		0.7				0.7
0.25						
0.30						
0.35						
SUM		4.3				4.3

TABLE VI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1200, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0		0.5				0.5
0.05		3.5				3.5
0.10		25.5	0.2			25.7
0.15		30.2				30.2
0.20		5.1				5.1
0.25		0.1				0.1
0.30						
0.35						
SUM		65.1	0.2			65.3

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1500, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0		0.3				0.3
0.05		0.8				0.8
0.10	0.1	2.2				2.3
0.15		3.4				3.4
0.20		0.7				0.7
0.25						
0.30						
0.35						
SUM	0.1	7.7				7.8

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1500, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0		0.1				0.1
0.05	0.2	4.5				4.7
0.10	0.3	25.4				25.7
0.15	0.2	23.6				23.8
0.20		6.7				6.7
0.25						
0.30						
0.35						
SUM	0.7	60.5				61.2

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB		1500, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.1				0.1
0.0						
0.05		0.2				0.2
0.10		0.2				0.2
0.15						
0.20						
0.25						
0.30						
0.35						
SUM		0.6				0.6

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		1500, BY MISSION SEG. STEADY	
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0					
0.05					
0.10	0.5				0.5
0.15	0.5				0.5
0.20	0.3				0.3
0.25					
0.30					
0.35					
SUM	1.2				1.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		1500, BY MISSION S.G.		SUM
LESS	0.06	0.09	0.12	0.15	SUM	
LESS	0.5				0.5	
0.0	0.4				0.4	
0.05	0.2	5.6			5.7	
0.10	0.4	28.3			28.7	
0.15	0.2	27.5			27.7	
0.20		7.7			7.7	
0.25						
0.30						
0.35						
SUM	0.9	70.0			70.8	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		1800, BY MISSION S.G. ASCENT	
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0					
0.05					
0.10	1.7				1.7
0.15	1.4				1.4
0.20	0.2				0.2
0.25					
0.30					
0.35					
SUM	3.4				3.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		1800, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0					
0.05	1.6				1.6
0.10	9.4	0.1			9.5
0.15	8.5				8.5
0.20	1.9				1.9
0.25	0.1				0.1
0.30					
0.35					
SUM	21.4	0.1			21.5

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0						
0.05						
0.10						
0.15		0.1				0.1
0.20		0.2				0.2
0.25						
0.30						
0.35						
SUM		0.3				0.3

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. SUM
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0						
0.05		1.6				1.6
0.10		11.1	0.1			11.2
0.15		10.1				10.1
0.20		2.3				2.3
0.25		0.1				0.1
0.30						
0.35						
SUM		25.1	0.1			25.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION S.G. ASCENT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0		0.1				0.1
0.05		0.5				0.5
0.10	0.1	0.1				0.2
0.15		1.6				1.6
0.20		1.7				1.7
0.25		0.4				0.4
0.30						
0.35						
SUM	0.1	4.4				4.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION S.G. MANJVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0		0.2				0.2
0.05		0.1				0.1
0.10		2.2				2.2
0.15		13.5				13.5
0.20	0.1	17.8				18.0
0.25		3.0				3.0
0.30						
0.35						
SUM	0.2	36.9				37.1

TABLE VI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION S.G. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10		0.1				0.1
0.15						
0.20		0.2				0.2
0.25						
0.30						
0.35						
SUM		0.3				0.3

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15	SUM	
LESS		0.3				0.3	
0.0		0.7				0.7	
0.05	0.1	2.3				2.4	
0.10		15.2				15.2	
0.15	0.1	19.6				19.7	
0.20	0.0	3.6				3.6	
0.25							
0.30							
0.35							
SUM	0.3	41.6				41.9	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				SUM, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15	SUM	
LESS	6.7	216.8	0.1			223.6	
0.0	2.1	263.9	0.7			266.7	
0.05	3.7	874.7	1.5			880.0	
0.10	10.8	3897.4	8.4			3906.6	
0.15	17.3	5549.0	3.2			5562.4	
0.20	2.9	1228.6	4.7			1236.3	
0.25	0.9	28.5	0.1			29.4	
0.30		0.6				0.6	
0.35							
SUM	37.5	12049.4	18.7			12105.7	

TABLE VII. TIME FOR ENGINE TORQUE VERSUS AIRSPEED
BY WEIGHT AND ALTITUDE, SAMPLE I

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000 ,										BY ALTITUDE 1000
	LESS	10	20	30	40	50	60	70	SUM	
LESS		0.9	0.1	0.2					1.2	
40		0.2							0.2	
60		0.2							0.2	
70		0.1							0.1	
80		0.2							0.2	
90			0.3						0.3	
100		0.1	0.2						0.3	
110										
120										
130										
140										
150										
160										
170										
180										
SUM		1.6	0.6	0.2					2.4	

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000 ,										BY ALTITUDE 2000
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.4	0.5	4.4	2.0					7.3	
40	0.6	0.3	0.0	0.5					1.5	
60	0.1	0.5	0.1	0.3					1.1	
70	0.1	1.4	0.2	0.1					1.8	
80	0.1	0.4	0.1	0.0					0.7	
90		0.1	0.6	0.4					1.1	
100		0.4	1.7	0.7					2.8	
110		0.3	0.6	0.8					1.7	
120			1.1	0.7					1.8	
130			0.5	0.6					1.1	
140				2.0					2.0	
150				0.4					0.4	
160										
170										
180										
SUM	1.3	3.9	9.5	8.6					23.3	

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 6000 ,										BY ALTITUDE SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.4	1.4	4.5	2.2					8.5	
40	0.6	0.5	0.0	0.5					1.6	
60	0.1	0.6	0.1	0.3					1.2	
70	0.1	1.5	0.2	0.1					1.9	
80	0.1	0.6	0.1	0.0					0.9	
90		0.1	0.9	0.4					1.4	
100		0.5	1.9	0.7					3.1	
110		0.3	0.6	0.8					1.7	
120			1.1	0.7					1.8	
130			0.5	0.6					1.1	
140				2.0					2.0	
150				0.4					0.4	
160										
170										
180										
SUM	1.3	5.5	10.1	8.8					25.7	

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,								BY ALTITUDE	LESS
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.1	0.6	0.9	2.3					3.9
40	0.3	0.1	0.3						0.7
60	0.1	0.3							0.5
70		0.1							0.1
80	0.1								0.1
90	0.3								0.0
100	0.0								0.0
110		0.0	0.1						0.1
120			0.0	0.1					0.1
130									
140									
150									
160									
170									
180									
SUM	0.7	1.2	1.4	2.4					5.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,								BY ALTITUDE	1000
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.8	2.6	3.2	5.3	0.2				12.0
40	0.9	2.3	0.8	1.0					5.0
60	0.3	1.5	1.4	0.6					3.8
70	1.7	1.9	2.2	1.8					6.6
80	0.4	0.6	5.0	2.4					8.4
90	0.1	0.8	6.3	2.0					9.2
100	0.3	0.6	8.7	3.1					12.7
110	0.1	0.6	3.2	2.1					6.0
120			1.8	4.3					6.1
130				0.2					0.2
140									
150									
160									
170									
180									
SUM	3.8	10.8	32.6	22.6	0.2				70.1

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,								BY ALTITUDE	2000
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.7	0.6	1.8	3.4	0.1				6.6
40	0.3	1.1	1.9	1.0					4.2
60	0.8	1.0	6.0	3.7					11.4
70	0.4	1.9	12.6	7.4	0.0				22.3
80	0.8	1.8	22.1	15.6	0.0				40.4
90		0.8	29.9	23.9	1.0				55.6
100	1.3	1.4	18.7	32.8	1.8				55.1
110		0.7	4.0	10.0	3.1				17.9
120			3.5	5.6	1.5				10.6
130			1.1	3.9	0.6				5.6
140				1.9					1.9
150			0.1	1.1	0.4				1.6
160				0.4	0.3				0.7
170									
180									
SUM	3.3	9.3	101.7	110.6	9.0				234.0

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,								BY ALTITUDE	5000
	LESS	10	20	30	40	50	60	70	SUM
LESS									
40									
50									
70	0.1	0.2	0.3						0.6
80		0.6	0.4	0.3	0.5				1.7
90			0.3	1.5	0.2				2.0
100			2.1	4.0					6.1
110			0.1	7.9	0.4				8.4
120			0.1	1.3	2.9				4.8
130				1.4					1.4
140				0.4					0.4
150				0.3					0.3
160									
170									
180									
SUM	0.1	0.8	3.2	17.4	4.1				25.6

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,								BY ALTITUDE	SUM
	LESS	10	20	30	40	50	60	70	SUM
LESS	1.6	3.8	5.8	11.0	0.3				22.5
40	1.5	3.4	3.1	2.0					10.0
60	1.3	2.8	7.4	4.3					15.8
70	1.2	4.1	15.1	9.1	0.0				29.5
80	1.3	3.0	27.4	19.2	0.6				50.5
90	1.2	1.6	36.5	27.4	1.2				66.9
100	1.7	2.0	29.6	39.9	1.8				74.0
110	1.1	1.3	7.4	20.0	3.6				32.5
120			5.4	11.7	4.5				21.6
130			1.1	5.5	0.6				7.2
140				2.3					2.3
150			0.1	1.3	0.4				1.8
160				0.4	0.3				0.7
170									
180									
SUM	8.0	22.1	138.9	153.1	13.3				335.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,								BY ALTITUDE	LESS
	LESS	10	20	30	40	50	60	70	SUM
LESS	1.2	2.0	13.4	48.9	9.8		0.7		76.0
40	2.3	9.3	9.8	22.0	3.1				46.9
60	1.1	5.1	10.3	8.5	0.2				25.3
70	0.9	4.2	17.6	7.0	0.0				29.6
80	0.6	3.3	12.5	7.2		0.6			24.2
90	0.1	1.3	3.5	3.1					8.0
100	0.5	0.6	5.2	3.3					9.6
110	0.1		2.0	4.9		2.0			9.0
120			1.7	2.4	1.6				5.8
130			0.2		0.3				0.5
140									
150									
160									
170									
180									
SUM	7.4	25.8	76.2	107.4	15.1	2.6	0.7		235.2

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	1000
	LESS	10	20	30	40	50	60	70 SUM
LESS	1.5	5.1	15.5	39.5	14.0	1.8		77.3
40	3.9	20.9	81.9	67.7	5.7	0.2		180.3
60	3.3	20.1	109.3	53.2	2.9	0.5		189.2
70	3.9	20.4	116.3	65.6	3.6			206.7
80	1.6	19.9	160.9	83.2	4.1			269.7
90	3.8	15.4	134.7	105.7	5.2			261.8
100	1.3	4.4	63.7	75.1	5.0			149.2
110	0.7	1.2	25.1	31.5	10.6	0.2		69.4
120	3.4	0.1	5.3	6.2	7.0			19.1
130			0.4	1.2	3.3			5.0
140				0.3	0.3			0.6
150				0.2				3.2
160								
170								
180								
SUM	14.1	107.4	713.0	529.5	61.7	2.6		1428.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	2000
	LESS	10	20	30	40	50	60	70 SUM
LESS	1.3	8.1	19.3	36.8	17.7	1.6		84.7
40	5.5	25.2	60.7	60.9	13.4	0.4		166.2
60	3.3	18.6	112.9	84.6	14.6	0.8		234.7
70	3.2	23.0	181.7	173.2	20.5	0.6		402.4
80	3.1	30.7	308.0	317.5	37.9	0.6		697.7
90	3.5	21.5	321.7	412.6	62.5	0.7		822.6
100	2.2	17.7	164.2	328.7	87.3	1.6		601.7
110	0.7	5.4	60.4	165.5	124.5	0.9		357.4
120	3.3	3.9	16.0	62.0	86.7	3.2		172.0
130	0.0	1.3	5.2	17.2	30.6	0.6		54.9
140	0.3	0.7	1.3	3.6	2.7			8.6
150		0.1	0.6	0.8	0.8			2.2
160			0.3	0.5	0.4			1.1
170			0.0					0.0
180								
SUM	23.4	156.1	1252.4	1663.9	499.5	11.0		3606.3

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	5000
	LESS	10	20	30	40	50	60	70 SUM
LESS			0.0	0.1	0.1			0.3
40			0.0	0.6	1.8			2.4
60		0.2	0.2	2.3	4.2			6.9
70		1.4	2.4	3.1	1.8	0.4		9.2
80		0.4	8.9	12.2	0.5	0.5		22.5
90		0.2	12.4	13.7	4.8	0.2		31.3
100	0.1	0.9	4.2	19.5	4.9			29.6
110		1.0	2.4	11.7	17.5			32.6
120		0.1	0.2	1.4	3.4			5.1
130		0.6	0.0	0.2	0.7			1.5
140			0.1	0.1				0.2
150			0.1					3.1
160								
170								
180								
SUM	0.1	4.9	31.0	64.8	39.8	1.1		141.8

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT						8000	BY ALTITUDE		10000
	LESS	10	20	30	40	50	60	70	SUM
LESS									
40				0.8					0.8
60				1.3					1.3
70				0.1					
80		1.0		1.1					
90									
100									
110									
120									
130									
140									
150									
160									
170									
180									
SUM		1.0		3.3					4.3

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	SUM	
	LESS	10	20	30	40	50	60	70	SUM
LESS	3.9	15.2	48.2	125.4	41.6	3.3	0.7		238.3
40	12.1	55.5	152.4	152.0	24.0	0.6			396.6
60	7.7	43.9	232.7	150.0	21.8	1.2			457.3
70	5.1	49.1	318.0	249.0	26.0	1.0			648.2
80	5.3	55.3	490.3	421.2	42.4	1.6			1016.3
90	4.3	38.4	472.3	535.1	72.6	0.9			1123.6
100	3.8	23.6	237.4	426.6	97.2	1.6			790.2
110	1.6	7.6	89.9	213.7	152.7	3.0			468.5
120	0.7	4.1	23.3	72.0	98.8	3.2			202.0
130	0.0	1.9	5.9	18.6	34.9	0.6			61.9
140	0.3	0.7	1.4	4.0	2.9				9.3
150		0.1	0.7	0.9	0.8				2.5
160			0.3	0.5	0.4				1.1
170			0.0						0.0
180									
SUM	45.0	295.2	2072.7	2369.0	616.1	17.2	0.7		5415.9

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE	LESS	
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.3	6.0	11.2	44.8	22.2				84.4
40	3.0	9.3	33.1	19.3	8.3				73.0
60	0.5	6.0	21.5	13.5	1.7				43.1
70	0.4	4.2	21.4	9.2	1.9				37.1
80		1.8	29.1	18.4	1.7				50.9
90		1.1	33.4	28.9					63.4
100	0.1	1.2	17.3	24.1					42.8
110		0.2	1.1	9.6					10.8
120		0.2		0.9	1.4				2.4
130		0.1	0.0		1.6				1.7
140									
150									
160									
170									
180									
SUM	4.2	29.9	168.2	168.7	38.7				409.7

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE		1000
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.1	3.2	10.6	32.3	28.7	4.4			79.3
40	1.0	10.4	50.5	48.6	9.9	1.2			121.7
60	0.7	10.1	69.0	46.3	10.8	0.4			137.3
70	0.6	10.6	107.3	50.5	9.2	0.9			179.0
80	0.4	12.9	141.3	77.5	6.8				238.9
90	0.2	4.9	110.9	91.1	8.3				215.3
100		2.1	37.3	75.3	6.4				121.2
110		1.6	5.7	38.8	4.1				50.1
120		0.5	1.0	15.2	3.6				20.3
130	0.1	0.0	0.1	0.6	1.3				2.2
140	0.1	0.1	0.5	0.4	0.1				1.1
150									
160									
170									
180									
SUM	3.1	56.4	534.2	476.7	89.2	7.0			1166.6

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE		2000
	LESS	10	20	30	40	50	60	70	SUM
LESS	1.1	4.5	4.7	25.2	33.7	6.4			75.3
40	2.6	8.2	21.2	21.0	10.2	3.6			66.8
60	1.5	11.5	59.8	36.9	17.8	1.3			127.6
70	2.1	10.7	127.1	87.5	18.3	0.8			246.5
80	1.3	18.1	236.7	230.2	37.0	1.6			525.0
90	2.0	16.3	199.2	350.3	44.9	2.9			616.1
100		7.9	87.9	268.8	70.0	0.8			435.4
110	1.5	4.4	20.2	132.8	89.6	0.7			249.2
120		1.4	10.6	57.2	73.5	6.1			148.8
130		0.4	3.3	9.8	33.0	2.3			48.9
140		0.2	0.6	1.6	2.2				4.5
150		0.1	0.7	1.2	0.1				2.1
160			0.2	0.3	0.0				0.5
170									
180									
SUM	12.2	44.4	770.8	1222.7	430.2	26.6			2546.8

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE		5000
	LESS	10	20	30	40	50	60	70	SUM
LESS			0.1	0.8					0.9
40		0.1	0.1	1.2	0.1				1.6
60	0.5	0.1	0.2	0.6	0.1				1.5
70	0.4	0.8	0.3	0.4	0.5				2.5
80		0.5	0.7	3.6	1.6				6.4
90		0.9	2.2	5.6	2.8				11.5
100		0.1	1.5	4.7	6.2				12.5
110		0.1	0.6	4.1	5.1				9.9
120		0.2	0.8	1.9	3.7				6.7
130				0.1	0.2				0.3
140				0.2					0.2
150				0.1					0.1
160				0.6					0.6
170									
180									
SUM	0.9	2.8	6.6	24.0	20.4				54.7

TABLE VII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE	SUM
	LESS	10	20	30	40	50	60	70 SUM
LESS	1.5	13.8	26.2	103.0	84.7	10.8		240.0
40	6.6	28.0	105.0	90.1	28.5	4.9		263.1
60	3.1	27.7	149.5	97.3	30.3	1.7		309.6
70	3.5	26.2	256.2	147.6	29.9	1.7		465.1
80	1.7	33.4	407.8	329.7	47.1	1.6		821.2
90	2.2	23.7	345.6	476.0	55.9	2.9		906.3
100	0.1	11.3	144.1	373.0	92.6	0.8		611.9
110	1.5	6.2	27.5	185.3	98.8	0.7		320.0
120		2.3	12.4	75.2	82.3	6.1		178.2
130	0.1	0.5	3.5	10.5	36.1	2.3		53.0
140	0.1	0.2	1.1	2.2	2.3			5.9
150		0.1	0.7	1.3	0.1			2.2
160			0.2	0.9	0.0			1.1
170								
180								
SUM	20.3	173.5	1479.7	1892.1	578.5	33.6		4177.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT							SUM,	BY ALTITUDE	SUM
	LESS	10	20	30	40	50	60	70	SUM
LESS	7.4	34.1	84.7	241.6	126.5	14.2	0.7		509.3
40	20.8	87.4	260.5	244.7	52.5	5.5			671.3
60	12.2	75.0	389.7	251.9	52.1	3.0			783.9
70	9.9	80.8	539.5	405.9	55.9	2.8			1144.8
80	8.5	92.3	925.7	769.2	90.1	3.2			1889.0
90	6.7	63.8	855.3	1038.9	129.8	3.9			2098.3
100	4.7	37.4	413.0	840.1	181.6	2.4			1479.2
110	3.3	15.5	125.4	419.7	255.0	3.8			822.6
120	0.7	6.4	42.2	159.6	185.5	9.2			403.6
130	0.1	2.4	10.9	35.1	71.7	2.9			123.2
140	0.4	0.9	2.5	10.5	5.2				19.5
150		0.2	1.4	4.0	1.3				6.9
160			0.5	1.7	0.7				2.9
170			0.0						0.0
180									
SUM	74.6	496.3	3701.4	4423.0	1207.9	50.8	0.7		9954.7

TABLE VIII. TIME FOR ENGINE TORQUE VERSUS ROTOR RPM BY MISSION SEGMENT, RATE OF CLIMB AND OUTSIDE AIR TEMPERATURE, SAMPLE I

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB LESS, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.1							0.1		
325										
330										
340										
355										
SUM	0.1							0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB LESS, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.1							0.1		
325										
330										
340										
355										
SUM	0.1							0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1200, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310				0.1				0.1		
325										
330										
340										
355										
SUM				0.1				0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1200, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.2	0.4					0.6		
325										
330										
340										
355										
SUM		0.2	0.4					0.6		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.1					0.2		
325										
330										
340										
355										
SUM		0.1	0.1					0.2		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.3	0.5	0.1				0.9		
325										
330										
340										
355										
SUM		0.3	0.5	0.1				0.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -900, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -900, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.5	0.8	0.2				1.5		
325										
330										
340										
355										
SUM		0.5	0.8	0.2				1.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -900, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295			0.1					0.1		
310		0.8						0.8		
325										
330										
340										
355										
SUM		0.9	0.1					0.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -900, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.6	0.1	0.2				0.9		
325										
330										
340										
355										
SUM		0.6	0.1	0.2				0.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE CF CLIMB -900, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295			0.1					0.1		
310		1.9	1.0	0.4				3.4		
325										
330										
340										
355										
SUM		1.9	1.1	0.4				3.5		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310				0.1				0.1		
325										
330										
340										
355										
SUM				0.1				0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.1				0.1		
310		0.1	0.4	1.2				1.7		
325										
330										
340										
355										
SUM		0.1	0.4	1.3				1.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.2	0.2	0.1				0.5		
310	0.1	0.2	5.1	0.8				6.2		
325										
330										
340										
355										
SUM	0.1	0.4	5.3	0.9				6.7		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1	0.3				0.4		
310		0.7	3.4	2.2	0.1			6.4		
325										
330										
340										
355										
SUM		0.7	3.5	2.5	0.1			6.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1	0.1				0.2		
310	0.2	0.4	2.8	1.5	0.1			5.0		
325		0.1						0.1		
330										
340										
355										
SUM	0.2	0.5	2.9	1.6	0.1			5.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY DAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.2	0.4	0.6				1.2		
310	0.3	1.4	11.7	5.9	0.2			19.5		
325		0.1						0.1		
330										
340										
355										
SUM	0.3	1.7	12.1	6.5	0.2			20.8		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										40
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.5					0.5		
325										
330										
340										
355										
SUM			0.5					0.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			1.5					1.5		
325										
330										
340										
355										
SUM			1.5					1.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.8	11.2	7.3	2.0			21.3		
325			0.5					0.5		
330										
340										
355										
SUM		0.8	11.8	7.3	2.0			21.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		5.8	7.0	0.8				13.7		
310	2.9	33.5	105.5	24.9	0.4			167.2		
325			0.3	0.7				1.0		
330										
340										
355										
SUM	2.9	39.3	112.8	26.4	0.4			181.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.1	1.8	0.7				2.6		
310	0.7	15.9	59.6	32.9	2.0			111.1		
325			0.4					0.4		
330										
340										
355										
SUM	0.7	16.0	61.9	33.6	2.0			114.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.7	2.7	1.9				5.3		
310	1.3	0.6	4.6	31.1	13.7	0.7		51.0		
325			0.1	0.6	0.3			1.0		
330										
340										
355										
SUM	1.3	0.6	5.4	34.4	16.0	0.7		57.4		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295		6.6	11.6	3.4				21.6		
310	7.3	4.2	54.8	209.5	78.9	5.0		352.6		
325			0.1	1.9	1.0			3.0		
330										
340										
355										
SUM	7.3	4.2	61.5	222.9	83.3	5.0		377.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.1	0.7				0.8		
325										
330										
340										
355										
SUM			0.1	0.7				0.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295				0.5				0.5		
310		0.9	9.9	11.0	0.6	0.7		23.2		
325										
330										
340										
355										
SUM		0.9	9.9	11.5	0.6	0.7		23.7		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295			1.0	0.9	2.3			4.2		
310		10.7	75.7	64.8	0.6			151.7		
325			0.1	0.1				0.2		
330										
340										
355										
SUM		10.7	76.9	65.7	2.9			156.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295			0.2	1.3	0.9			2.5		
310	0.9	6.4	44.1	32.5	3.9			87.8		
325										
330										
340										
355										
SUM	0.9	6.4	44.3	33.9	4.8			90.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 300, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295			2.9	1.2				4.0		
310		0.9	23.2	17.1	3.9			45.0		
325				0.7				0.7		
330		0.1						0.1		
340										
355										
SUM		1.0	26.1	18.9	3.9			49.8		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295			4.2	3.9	3.2			11.3			
310	0.9	18.9	153.0	126.1	8.9	0.7		308.5			
325			0.1	0.8				0.9			
330		0.1						0.1			
340											
355											
SUM	0.9	19.0	157.2	130.7	12.2	0.7		320.8			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	40
LESS	10	20	30	40	50	60	70	SUM			
295											
310			2.6					2.6			
325											
330											
340											
355											
SUM			2.6					2.6			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
295											
310			0.5					0.5			
325											
330											
340											
355											
SUM			0.5					0.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
295											
310				3.5				3.5			
325											
330											
340											
355											
SUM				3.5				3.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
295			1.2	0.1	0.8			2.1			
310		1.5	21.3	19.6	0.8			43.2			
325											
330											
340											
355											
SUM		1.5	22.5	19.7	1.7			45.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
295			0.1		0.8			0.9			
310		0.1	10.2	12.2	4.9			27.5			
325											
330											
340											
355											
SUM		0.1	10.3	12.2	5.7			28.4			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295			0.3	0.1	0.9			1.3			
310		0.1	9.7	4.5	2.5			16.7			
325											
330											
340											
355											
SUM		0.1	10.0	4.6	3.4			18.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295			1.6	0.2	2.5			4.3			
310		1.7	44.2	39.8	8.2			94.0			
325											
330											
340											
355											
SUM		1.7	45.8	40.0	10.8			98.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
295				2.0				2.0			
310											
325											
330											
340											
355											
SUM				2.0				2.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
295				0.6				0.6			
310			1.1	1.5				2.6			
325											
330											
340											
355											
SUM			1.1	2.1				3.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
295		0.1						0.1			
310		0.4	9.4	8.8				18.7			
325											
330											
340											
355											
SUM		0.5	9.4	8.8				18.8			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
295					0.3			0.3			
310		0.2	5.2	4.6	4.6			14.6			
325			0.1					0.1			
330											
340											
355											
SUM		0.2	5.3	4.6	4.9			15.0			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.1						0.1			
310		0.1	4.1	2.9	1.0			3.1			
325		0.1		0.1				0.2			
330											
340											
355											
SUM		0.3	4.1	3.0	1.0			8.4			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										930, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.2		2.6	0.3			3.0			
310		0.7	19.8	17.8	5.6			44.0			
325		0.1	0.1	0.1				0.3			
330											
340											
355											
SUM		1.0	19.9	20.5	5.9			47.4			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										1200, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.2				0.2			
310			0.1					0.1			
325											
330											
340											
355											
SUM			0.1	0.2				0.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										1200, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			1.9	2.3				4.1			
325											
330											
340											
355											
SUM			1.9	2.3				4.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										1200, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.2				0.2			
310			0.3	1.1				1.4			
325											
330											
340											
355											
SUM			0.3	1.3				1.6			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										1200, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			1.3	0.3				1.5			
325											
330											
340											
355											
SUM			1.3	0.3				1.5			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.4				0.4		
310			3.5	3.7				7.2		
325										
330										
340										
355										
SUM			3.5	4.1				7.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.8	0.6				1.4		
325										
330										
340										
355										
SUM		0.1	0.8	0.6				1.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.4	0.3			0.7		
310		0.2	0.4	2.4	0.4			3.4		
325										
330										
340										
355										
SUM		0.2	0.4	2.8	0.7			4.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.4	0.8	0.1			1.3		
325										
330										
340										
355										
SUM			0.4	0.8	0.1			1.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.4	0.3			0.7		
310		0.3	1.6	3.8	0.5			6.1		
325										
330										
340										
355										
SUM		0.3	1.6	4.2	0.8			6.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.2	0.2			0.4		
310			0.5	0.1				0.6		
325			0.1					0.1		
330										
340										
355										
SUM			0.6	0.3	0.2			1.1		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.6	0.8	0.1			1.5		
325										
330										
340										
355										
SUM			0.6	0.8	0.1			1.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.2					0.2		
325										
330										
340										
355										
SUM			0.2					0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.2	0.2			0.4		
310			1.3	0.9	0.1			2.3		
325			0.1					0.1		
330										
340										
355										
SUM			1.4	1.2	0.3			2.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.5	0.5				1.1		
325		0.1						0.1		
330										
340										
355										
SUM		0.2	0.5	0.5				1.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.3				0.3		
310		0.1	0.3	0.9				1.3		
325										
330										
340										
355										
SUM		0.1	0.3	1.2				1.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.7	0.1				1.0		
325										
330										
340										
355										
SUM		0.1	0.7	0.1				1.0		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.3				0.3		
310		0.3	1.5	1.5				3.4		
325		0.1						0.1		
330										
340										
355										
SUM		0.5	1.5	1.8				3.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										40
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.2							0.2		
325										
330										
340										
355										
SUM	0.2							0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.4	1.4	2.0	0.1				3.9		
325										
330										
340										
355										
SUM	0.4	1.4	2.0	0.1				3.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295	0.3	0.1	0.2	0.4				1.0		
310	0.3	2.7	8.8	10.4	1.1			23.2		
325	0.2	0.5	0.2	0.1				1.0		
330	0.1	0.1						0.1		
340										
355										
SUM	0.4	3.3	9.2	10.9	1.1			25.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295	1.0			0.2				0.2		
310	1.0	2.4	7.4	10.1	3.5			24.3		
325	0.1	0.2	0.1	0.1				0.5		
330	0.0							0.0		
340										
355										
SUM	1.2	2.6	7.5	10.1	3.6			25.0		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										40
LESS	10	20	30	40	50	60	70	SUM		
295				0.1				0.2		
310	0.3	1.0	2.1	0.5				4.2		
325										
330	0.1	0.1						0.1		
340	0.1							0.1		
355										
SUM	0.1	0.3	1.3	2.1	0.6			4.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295	0.1	0.2	0.4	0.3				0.1		
310	1.3	5.9	18.8	24.6	5.2			1.3		
325	0.3	0.7	0.3	0.2				55.9		
330	0.1	0.1	0.1					1.5		
340	0.1							0.3		
355								0.1		
SUM	2.2	6.8	19.4	25.2	5.4			59.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
295										
310	0.2	0.3						0.5		
325										
330										
340										
355										
SUM	0.2	0.3						0.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310	0.1	0.5						0.6		
325										
330										
340										
355										
SUM	0.1	0.5						0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295		0.1	0.6	0.3				0.7		
310	0.8	2.7	2.2					6.0		
325	0.2							0.2		
330										
340										
355										
SUM	0.2	0.8	2.8	2.8	0.3			6.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295		0.0	0.0					0.1		
310	0.1	0.6	2.4	2.4	0.1			5.6		
325	0.2							0.2		
330										
340										
355										
SUM	0.1	0.8	2.4	2.5	0.1			5.9		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										40
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.1						0.1	
310		0.3	0.8	0.6					1.6	
325										
330										
340										
355										
SUM		0.3	0.9	0.6					1.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.3	7.6					0.9	
310	0.1	2.0	6.6	5.2	0.3				14.4	
325	7.2	0.2							0.4	
330										
340										
355										
SUM	0.3	2.2	6.9	5.9	0.3				15.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										40
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.3							0.3	
325										
330										
340										
355										
SUM		0.3							0.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.1					0.1	
310			0.5	0.1					0.6	
325										
330										
340										
355										
SUM			0.5	0.2					0.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	7.4								0.4	
310		0.1	1.1	1.1					2.3	
325			0.1						0.1	
330										
340										
355										
SUM	7.4	0.1	1.2	1.1					2.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	7.2		0.5	0.5	0.2				0.2	
310	7.4	2.1	8.9	8.8	0.8				20.9	
325	7.8	7.1	0.2						1.1	
330										
340										
355										
SUM	1.4	2.2	9.5	9.3	1.0				23.4	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1								0.1	
310		0.1							0.1	
325	0.1	1.6	6.3	9.2	4.0	0.3			21.4	
330		0.8	0.1	0.1					1.2	
340										
355										
SUM	2.3	2.5	6.4	9.3	4.0	0.3			22.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1								0.1	
310	0.5	0.7	3.3	3.6	1.6	0.1			9.7	
325										
330										
340										
355										
SUM	0.6	0.7	3.3	3.6	1.6	0.1			9.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.3								0.3	
310	0.5	0.1	0.5	0.6	0.2				1.9	
325	1.0	4.7	19.9	22.9	6.4	0.4			55.3	
330	0.9	1.0	0.4	0.1					2.4	
340										
355										
SUM	2.8	5.8	20.9	23.5	6.6	0.4			59.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										40
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310		1.8							1.8	
325										
330										
340										
355										
SUM		1.8							1.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				0.1					0.1	
310			0.2						0.2	
325										
330										
340										
355										
SUM			0.2	0.1					0.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.5								0.5	
310	0.0	0.2	0.1	0.2					0.6	
325										
330										
340										
355										
SUM	0.5	0.2	0.1	0.2					1.0	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295	0.1							0.1		
310	0.0		0.4	0.7	0.1			1.2		
325	0.3	2.5	7.0	4.8	0.4			14.8		
330	0.1							0.1		
340										
355										
SUM	0.5	2.5	7.3	5.4	0.5			16.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295	0.0							0.0		
310	0.1			0.1	0.2			0.4		
325	0.5	1.8	3.3	4.0	0.6			10.2		
330	0.1							0.1		
340										
355										
SUM	0.7	1.8	3.3	4.2	0.8			10.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295				0.1				0.1		
310	0.2	0.7	1.1	2.0	0.4			4.3		
325	0.1							0.1		
330										
340										
355										
SUM	0.3	0.7	1.1	2.1	0.4			4.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295	0.1							0.1		
310	0.6		0.4	1.0	0.3			2.2		
325	1.0	7.1	11.6	11.0	1.3			31.9		
330	0.2							0.2		
340	0.1							0.1		
355										
SUM	2.1	7.1	12.0	11.9	1.6			34.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1200, BY OAT										40
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB -1200, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
295				0.1				0.1		
310			0.3					0.3		
325	0.1	0.7	0.8					1.6		
330										
340										
355										
SUM	0.1	0.7	1.1	0.1				2.1		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	0.1	0.2	4.0	4.5	0.2				9.0	
325										
330										
340										
355										
SUM	0.1	0.2	4.0	4.5	0.2				9.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.1		0.9	1.9	0.1				3.0	
310	0.9	7.7	29.7	20.9	2.7				61.9	
325	0.2	0.4	0.4	0.1					1.2	
330	0.0								0.0	
340										
355										
SUM	1.4	8.1	30.9	22.9	2.8				66.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1		0.6	0.5	0.1				1.2	
310	0.1	4.0	17.8	25.5	11.7	0.1			59.3	
325	0.1	0.3	0.6	0.4					1.3	
330			0.1						0.1	
340										
355										
SUM	0.3	4.3	19.1	26.3	11.8	0.1			62.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1			0.2	0.3				0.6	
310	0.9	1.7	7.5	7.5	4.4	0.1			22.1	
325										
330										
340										
355										
SUM	1.0	1.7	7.5	7.7	4.7	0.1			22.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1				0.1				0.2	
295	0.3		1.5	2.9	0.5				5.1	
310	1.9	13.6	59.8	59.2	19.0	0.2			154.0	
325	0.4	0.7	1.0	0.5					2.5	
330	0.0		0.1						0.2	
340										
355										
SUM	2.7	14.5	62.3	62.6	19.6	0.2			162.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										40
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			0.2						0.2	
325										
330										
340										
355										
SUM			0.2						0.2	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.7	0.5					1.2	
310			0.9						0.9	
325										
330										
340										
355										
SUM		1.6	0.5						2.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.4	1.4	3.9	0.2				6.0	
325										
330										
340										
355										
SUM		0.4	1.4	3.9	0.2				6.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.8	0.3	0.3	0.2	0.1				1.7	
310	0.4	6.0	25.1	15.3	0.9				47.7	
325			0.3						0.3	
330										
340										
355										
SUM	1.3	6.3	25.7	15.5	1.0				49.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.5	0.2	0.2				0.9	
310		8.6	20.0	19.4	5.3				53.3	
325	0.1		0.3						0.4	
330										
340										
355										
SUM	0.1	8.6	20.8	19.6	5.5				54.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.1	0.0	0.3	0.5	0.4				1.3	
310	1.4	1.3	4.0	6.8	1.4				14.9	
325										
330										
340										
355										
SUM	1.6	1.3	4.3	7.4	1.7				16.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.2								0.2	
295	0.9	0.3	1.8	1.4	0.7				5.1	
310	1.8	16.3	51.6	45.5	7.7				122.9	
325	0.1		0.6						0.7	
330										
340										
355										
SUM	3.1	16.6	54.0	46.9	8.4				129.0	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										40
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.2							0.2	
325										
330										
340										
355										
SUM		0.2							0.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.6	1.1	0.4				2.2	
310		0.4	2.2	1.8					4.4	
325										
330										
340										
355										
SUM		0.4	2.8	2.9	0.4				6.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.1					0.1	
310	0.5	0.4	9.2	7.7	0.2				18.0	
325										
330										
340										
355										
SUM	0.5	0.4	9.2	7.8	0.2				18.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.4	0.3	5.6	4.3	0.6				11.2	
310	0.8	19.0	119.6	98.1	8.2	0.1			245.7	
325	0.4	0.2	1.6	0.1					2.2	
330	0.0								0.0	
340										
355										
SUM	1.6	19.5	126.7	102.4	8.8	0.1			259.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295		0.1	1.9	1.5	1.3				4.7	
310	0.7	10.8	75.8	86.8	29.7	0.2			204.0	
325		0.4	0.7	1.1					2.2	
330										
340										
355										
SUM	0.7	11.3	78.3	89.4	31.0	0.2			210.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295		0.3	0.3	1.3	0.7				2.6	
310	0.7	4.8	20.5	23.6	7.8				57.4	
325		0.0	0.1	0.2					0.4	
330										
340										
355										
SUM	0.7	5.1	20.9	25.1	8.5				60.3	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295	0.4	0.7	8.3	8.3	3.0			20.7		
310	2.7	35.6	227.2	218.0	46.0	0.3		529.7		
325	0.4	0.6	2.4	1.4				4.7		
330	0.0							0.0		
340										
355										
SUM	3.6	36.8	237.9	227.7	48.9	0.3		555.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										40
LESS	10	20	30	40	50	60	70	SUM		
295			1.2					1.2		
310										
325										
330										
340										
355										
SUM			1.2					1.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
295			15.3	5.6				20.9		
310	0.8	15.7	15.2					31.7		
325										
330										
340										
355										
SUM	0.8	15.7	30.6	5.6				52.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310		3.9	57.7	82.4	3.6			147.4		
325	0.1	0.4						0.5		
330										
340										
355										
SUM	0.1	4.3	57.7	82.4	3.6			148.0		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295	0.2		12.2	15.1	4.7			32.2		
310	1.4	59.4	648.7	629.6	60.7	0.1		1399.8		
325	0.1	0.3	0.8	0.2				1.5		
330										
340										
355										
SUM	1.7	59.7	661.7	644.9	65.4	0.1		1433.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295	0.0		21.0	15.3	6.2	0.2		42.7		
310	0.6	25.4	393.3	435.7	117.4	4.6		977.0		
325	0.1	0.6	4.9	6.4	0.4			12.4		
330	0.1	0.2	0.0					0.3		
340										
355										
SUM	0.8	26.2	419.2	457.4	124.0	4.8		1032.4		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295		0.1	0.6	4.4	2.6				8.2	
310	1.7	8.3	65.1	104.4	27.2	0.2			207.5	
325			1.0						1.0	
330										
340										
355										
SUM	1.7	8.4	66.7	109.8	29.8	0.2			216.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.2	0.1	33.8	51.9	19.0	0.2			105.2	
310	3.6	97.8	1180.4	1267.8	209.0	4.9			2763.6	
325	0.4	1.3	6.7	6.6	0.4				15.4	
330	0.1	0.2	0.0						0.3	
340										
355										
SUM	4.3	99.4	1221.0	1326.2	228.5	5.1			2884.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 300, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				0.1	0.1				0.1	
310		0.1	0.6	1.1	1.9				3.0	
325				2.5	0.1				3.3	
330										
340										
355										
SUM		0.1	0.6	3.7	2.1				6.4	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 300, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295					0.1				0.1	
310		0.2	6.9	12.4	0.4				19.9	
325		0.1							0.1	
330										
340										
355										
SUM		0.3	6.9	12.4	0.5				20.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 300, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1	0.1	2.6	6.1	1.3	0.1			10.5	
310	0.2	7.2	84.6	135.0	29.3				256.2	
325	0.2	0.1	0.5	0.1					0.8	
330			0.1						0.1	
340										
355										
SUM	0.4	7.3	88.0	141.1	30.6	0.1			267.5	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 300, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295		0.2	3.6	2.9	3.4				10.1	
310	0.2	3.8	62.3	111.6	51.0	1.7			230.6	
325		0.1	0.6	0.8	0.2				1.7	
330										
340										
355										
SUM	0.2	4.1	66.5	115.3	54.7	1.7			242.3	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										300, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.1	4.6	0.8				5.5			
310		1.6	18.2	39.9	11.1	0.6		71.4			
325	0.1							0.1			
330											
340											
355											
SUM	0.1	1.6	18.3	44.5	11.9	0.6		77.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										300, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295	0.1	0.3	6.5	14.7	7.5	0.1		29.2			
310	0.4	12.8	172.7	301.4	91.9	2.3		581.5			
325	0.3	0.3	1.0	0.9	0.2			2.6			
330			0.1					0.1			
340											
355											
SUM	0.7	13.4	180.3	317.0	99.7	2.4		613.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			0.5	0.5				0.9			
325											
330											
340											
355											
SUM			0.5	0.5				0.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	1.7	3.7	0.5			6.0			
325											
330											
340											
355											
SUM		0.1	1.7	3.7	0.5			6.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		1.0	0.9	1.1				3.0			
310	0.2	0.3	17.3	27.5	9.7	0.1		55.2			
325											
330											
340											
355											
SUM	0.2	0.3	18.3	28.4	10.8	0.1		58.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.5	2.4	1.4	0.9			5.2			
310	0.7	13.5	28.4	20.9	0.7			64.2			
325		0.4						0.4			
330											
340											
355											
SUM	0.7	14.4	30.9	22.2	1.6			69.8			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295			2.6	0.2				2.8			
310	0.1	2.3	13.0	2.3	0.4			18.1			
325											
330											
340											
355											
SUM	0.1	2.3	15.6	2.5	0.4			20.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295			1.5	6.0	2.7	0.9		11.0			
310	0.2	1.2	34.8	73.1	33.9	1.2		144.4			
325			0.4					0.4			
330											
340											
355											
SUM	0.2	1.2	36.7	79.0	36.6	2.2		155.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
295			0.2	0.1				0.3			
310		0.3	0.5					0.8			
325											
330											
340											
355											
SUM		0.3	0.7	0.1				1.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
295											
310		1.4	4.4	0.6				6.4			
325											
330											
340											
355											
SUM		1.4	4.4	0.6				6.4			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
295			0.9	0.7	0.5			2.0			
310	0.1	1.9	20.1	29.3	12.5	0.1		64.1			
325			0.2					0.2			
330											
340											
355											
SUM	0.1	1.9	21.2	30.0	13.0	0.1		66.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
295			0.0	0.6	1.0	0.1		2.5			
310		1.2	11.8	28.7	18.0	0.5		60.3			
325		0.2	0.4	1.0	0.1			1.7			
330	0.0							0.0			
340											
355											
SUM	0.0	1.4	12.3	30.4	19.9	0.6		64.6			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	90
LESS	LESS	10	20	30	40	50	60	70	SUM		
295	7.0								0.0		
310		0.0		0.9	0.2				1.2		
325		0.6	5.3	12.6	4.3				22.8		
330		0.1							0.1		
340											
355											
SUM	0.0	0.7	5.3	13.6	4.5				24.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	SUM
LESS	LESS	10	20	30	40	50	60	70	SUM		
295	0.0	0.0	0.9	2.4	2.6	0.1			0.0		
310	0.1	3.8	39.0	75.6	35.5	0.6			154.5		
325		0.3	0.6	1.0	0.1				2.0		
330	0.0								0.0		
340											
355											
SUM	0.2	4.1	40.5	79.0	38.1	0.7			162.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										1200, BY OAT	60
LESS	LESS	10	20	30	40	50	60	70	SUM		
295											
310			0.3	0.2	0.1				0.6		
325											
330											
340											
355											
SUM			0.3	0.2	0.1				0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										1200, BY OAT	70
LESS	LESS	10	20	30	40	50	60	70	SUM		
295			0.6	0.4					1.0		
310	0.1	0.3	4.4	7.2	4.4				16.4		
325	0.1	0.1	0.1						0.2		
330											
340											
355											
SUM	0.2	0.4	5.1	7.6	4.4				17.7		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										1200, BY OAT	80
LESS	LESS	10	20	30	40	50	60	70	SUM		
295					0.2	0.3			0.5		
310		0.1	2.4	4.5	4.2				11.2		
325		0.1	0.4						0.5		
330											
340											
355											
SUM		0.2	2.8	4.5	4.4	0.3			12.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										1200, BY OAT	90
LESS	LESS	10	20	30	40	50	60	70	SUM		
295					0.4				0.4		
310			3.4	2.5	2.0				5.0		
325											
330				0.1					0.1		
340											
355											
SUM			0.4	2.6	2.3				5.4		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1200, BY OAT										SUM
LESS	1	20	30	40	50	60	70	SUM		
LESS										
295			7.4	1.4	0.6	0.3		1.9		
310	7.1	0.4	7.6	14.7	17.7			37.2		
325	7.1	0.1	0.5					0.7		
330				0.1				0.1		
340										
355										
SUM	1.2	0.5	8.7	15.0	11.2	0.3		36.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1300, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1					0.1		
310		0.1	0.1					0.2		
325										
330										
340										
355										
SUM		0.1	0.2					0.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1500, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.3	2.0					2.3		
325										
330										
340										
355										
SUM		0.3	2.0					2.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.1	0.4					0.5		
310	0.7	5.2	11.1	2.4				19.9		
325		0.1	0.1					0.2		
330										
340										
355										
SUM	0.7	5.4	11.6	2.9				20.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1500, BY OAT										80
LESS	1	20	30	40	50	60	70	SUM		
LESS										
295				0.4				0.4		
310	0.1	0.4	4.1	7.5	6.5	0.1		19.0		
325			0.1	0.4				0.5		
330			0.1					0.2		
340										
355										
SUM	0.1	0.4	4.2	7.2	6.9	0.1		19.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANOVR. BY RATE OF CLIMB 1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.5	0.4				0.9		
310	0.1	1.9	3.1	2.8	0.4			6.2		
325		0.2						0.2		
330										
340										
355										
SUM	0.1	2.1	3.6	3.2	0.4			9.4		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295		0.1	1.1	0.8				2.0		
310	0.1	1.1	11.5	24.1	12.3	0.5		49.6		
325			0.4	0.4				0.8		
330			0.0					0.0		
340										
355										
SUM	0.1	1.1	12.1	25.6	13.1	0.5		52.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295			0.3	0.2	0.1			0.6		
310										
325										
330										
340										
355										
SUM			0.3	0.2	0.1			0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.5				0.6		
310		0.3	2.3	2.8	0.7			6.0		
325										
330										
340										
355										
SUM		0.3	2.4	3.3	0.7			6.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.4				0.5		
310	0.1	0.1	1.0	2.5	1.9			5.6		
325										
330										
340										
355										
SUM	0.1	0.1	1.0	2.6	2.2			6.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.2				0.3		
310			0.6	1.2	0.8			2.5		
325			0.1					0.1		
330										
340										
355										
SUM			0.7	1.3	0.9			2.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.7	0.6			1.3		
310	0.1	0.4	4.2	6.6	3.4			14.7		
325			0.1					0.1		
330										
340										
355										
SUM	0.1	0.4	4.3	7.3	4.0			16.1		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.2	0.6	0.1				0.9		
325										
330										
340										
355										
SUM		0.2	0.6	0.1				0.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.2					0.2		
310	0.3	4.1	4.3	1.3				10.0		
325		0.1						0.1		
330										
340										
355										
SUM	0.3	4.2	4.5	1.3				10.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.3				0.3		
310	0.3	1.6	6.2	5.4	0.2			13.8		
325	0.1	0.1	0.3					0.5		
330	0.1							0.1		
340										
355										
SUM	0.1	0.4	1.7	6.5	5.7	0.2		14.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.2	0.1				0.3		
310		0.1	1.6	1.3	0.1			3.1		
325			0.1					0.1		
330										
340										
355										
SUM		0.1	1.9	1.4	0.1			3.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			3.4	0.4				3.8		
310	0.6	6.0	12.7	8.1	0.3			27.8		
325	0.1	0.2	0.4					0.7		
330	0.1							0.1		
340										
355										
SUM	0.1	0.7	6.2	13.5	8.5	0.3		29.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.4	0.1						0.5		
325										
330										
340										
355										
SUM	0.4	0.1						0.5		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										LESS, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310	0.1	0.8	0.4	0.1				1.4			
325		0.1						0.1			
330											
340											
355											
SUM	0.1	0.9	0.4	0.1				1.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										LESS, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310	1.1	0.3	0.6					1.0			
325	0.1	0.4						0.5			
330											
340											
355											
SUM	0.2	0.7	0.6					1.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										LESS, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310	0.1		0.1	0.2				0.4			
325											
330											
340											
355											
SUM	0.1		0.1	0.2				0.4			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										LESS, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310	0.3	1.5	1.2	0.3				3.3			
325	0.1	0.5						0.6			
330											
340											
355											
SUM	0.4	2.0	1.2	0.3				3.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										60	
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1						0.1			
325											
330											
340											
355											
SUM		0.1						0.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										70	
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310	0.2	1.1	0.4	0.3				2.1			
325	0.4							0.4			
330											
340											
355											
SUM	0.6	1.2	0.4	0.3				2.5			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.2	0.1						0.3		
325	0.1							0.1		
330										
340										
355										
SUM	0.3	0.1						0.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1						0.1		
325		0.1						0.1		
330										
340										
355										
SUM		0.2						0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.4	1.5	0.4	0.3				2.6		
325	0.5	0.1						0.6		
330										
340										
355										
SUM	0.9	1.6	0.4	0.3				3.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.4	0.1					0.5		
325										
330										
340										
355										
SUM		0.4	0.1					0.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.3	1.3	3.0	0.3	0.1			5.1		
325		0.1						0.1		
330	0.0							0.0		
340	0.0							0.0		
355										
SUM	0.4	1.4	3.0	0.3	0.1			5.3		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		1.1	0.8	0.5					2.4	
325		0.3							0.3	
330										
340										
355										
SUM		1.4	0.8	0.5					2.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1								0.1	
310	0.2	0.1	0.3						0.6	
325		0.2							0.2	
330										
340										
355										
SUM	0.3	0.3	0.3						0.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1								0.1	
310	0.5	2.9	4.3	0.9	0.1				8.7	
325		0.6							0.6	
330	0.0								0.0	
340	0.0								0.0	
355										
SUM	0.7	3.5	4.3	0.9	0.1				9.5	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.2	0.5	0.5					1.2	
325										
330										
340										
355										
SUM		0.2	0.5	0.5					1.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2								0.2	
310	0.3	2.1	2.9	2.0					7.4	
325	0.1	0.1							0.2	
330										
340										
355										
SUM	0.6	2.2	2.9	2.0					7.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2								0.2	
310	0.3	1.2	0.8	0.1	0.1				2.3	
325										
330	0.1								0.1	
340										
355										
SUM	0.7	1.2	0.8	0.1	0.1				2.9	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	7.4								0.4	
310	0.4								0.4	
325	0.2	0.2		0.6					1.0	
330		0.1							0.1	
340										
355										
SUM	1.0	0.3		0.6					1.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.6								0.6	
310	0.9								0.9	
325	0.6	3.7	4.2	3.3	0.1				11.9	
330	0.1	0.2							0.3	
340	0.1								0.1	
355										
SUM	2.3	3.9	4.2	3.3	0.1				13.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310				0.2					0.2	
325										
330										
340										
355										
SUM				0.2					0.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310	0.1	0.5	0.5	0.3					1.4	
325										
330										
340										
355										
SUM	1.1	0.5	0.5	0.3					1.4	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1								0.1	
310	0.1		0.1	0.1					0.3	
325	0.9	7.6	5.9	2.3	0.5				17.0	
330	0.0	0.1							0.2	
340	0.0								0.0	
355										
SUM	1.2	7.7	5.9	2.4	0.5				17.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.5								0.5	
310	1.3	3.0	2.6	1.2	0.3				8.4	
325	0.4	0.5		0.1					1.0	
330										
340										
355										
SUM	2.2	3.5	2.6	1.3	0.3				9.9	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY DAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.6								0.6	
310	1.5	1.2	2.2	0.3					4.2	
325		0.2	0.1						0.3	
330										
340										
355										
SUM	1.1	1.4	2.3	0.3					5.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY DAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	1.1								0.1	
310	1.2		0.1	0.1					1.4	
325	2.8	12.2	11.1	4.3	0.8				31.2	
330	0.4	0.8	0.1	0.1					1.4	
340	0.0								0.0	
355										
SUM	4.5	13.0	11.3	4.5	0.9				34.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY DAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.9	3.7	3.1					7.7	
325										
330										
340										
355										
SUM		0.9	3.7	3.1					7.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY DAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2	0.2							0.4	
310	1.3	10.1	8.8	4.1					24.3	
325		0.5	0.3						0.8	
330										
340										
355										
SUM	1.5	10.8	9.1	4.1					25.5	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY DAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2								0.2	
310	0.7		0.5						1.2	
325	2.3	7.8	9.5	2.0					21.6	
330	0.5	0.5	0.3						1.3	
340										
355										
SUM	3.7	8.3	10.3	2.0					24.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -700, BY DAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.6		0.1						0.7	
310	0.1	0.4	1.7	1.1	0.1				3.4	
325		0.1	0.2						0.3	
330										
340										
355										
SUM	0.7	0.5	1.9	1.1	0.1				3.4	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.2								0.2	
310	1.5	0.2	0.4						2.3	
325	4.6	21.2	23.7	19.2	0.1				59.7	
330	0.5	1.5	0.4						2.8	
340										
355										
SUM	6.8	22.8	25.1	10.2	0.1				65.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310		2.2		0.8					3.0	
325										
330										
340										
355										
SUM		2.2		0.8					3.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310	0.7	3.8	8.1	5.9	0.1				18.7	
325		2.0							2.0	
330										
340										
355										
SUM	0.7	5.8	8.1	5.9	0.1				20.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.5								0.5	
310	0.7	0.1	2.3	0.7					3.8	
325	3.6	35.7	57.6	6.5	2.7				106.1	
330	0.4	1.7	0.2	0.2					2.5	
340										
355										
SUM	5.3	37.5	60.1	7.4	2.7				112.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.3								0.3	
310	0.4	0.1	0.3						0.8	
325	4.1	13.5	25.6	6.3	2.5	0.1			51.9	
330	0.4	1.5	0.8	0.1					2.8	
340		0.0							0.0	
355										
SUM	5.2	15.2	26.7	6.4	2.5	0.1			56.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1								0.1	
310	1.0			0.1					1.1	
325	4.1	11.2	10.1	2.2	0.1				27.7	
330	0.2	1.3	0.1						1.6	
340		0.1							0.1	
355										
SUM	5.4	12.6	10.2	2.3	0.1				30.6	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.9								0.9	
310	2.2	0.2	2.6	0.8					5.8	
325	12.5	66.3	101.4	21.7	5.3	0.1			207.4	
330	0.9	6.6	1.1	0.3					8.9	
340		0.2							0.2	
355										
SUM	16.6	73.3	105.1	22.8	5.3	0.1			223.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				0.5					0.5	
310			6.6						6.6	
325										
330										
340										
355										
SUM			6.6	0.5					7.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295			0.4						0.4	
310	0.2	3.1	12.7	15.1	1.7				32.8	
325		0.2	0.4						0.6	
330										
340										
355										
SUM	0.2	3.3	13.5	15.1	1.7				33.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.5								0.5	
310	0.3	0.2	3.9	0.8	0.1				5.3	
325	3.4	51.5	105.0	30.3	1.9				192.1	
330	1.0	1.2	0.9						3.1	
340										
355										
SUM	5.2	52.9	109.8	31.1	2.0				201.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1								0.1	
310	0.5	0.7	0.9	0.3	0.1				2.5	
325	3.7	38.1	45.4	20.0	3.1				110.3	
330	1.1	6.1	2.4	0.5					10.1	
340	0.0								0.0	
355	0.0								0.0	
SUM	5.5	44.9	48.7	20.8	3.2				123.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.4								0.4	
310	0.7		0.3	0.4					1.4	
325	4.6	20.9	31.5	8.9	2.0				67.9	
330	0.7	2.1	2.0	0.7					5.5	
340	0.1		0.7						0.8	
355										
SUM	6.5	23.0	34.4	10.1	2.0				76.0	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										-300,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	SUM					
LESS	1.0							1.0					
295	1.4	0.9	5.5	2.1	0.2			10.1					
310	11.9	113.5	201.2	74.4	8.7			409.7					
325	2.8	9.6	5.7	1.2				19.3					
330	0.2		0.7					0.8					
340	0.0							0.0					
355													
SUM	17.4	124.0	213.0	77.6	8.9			441.0					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300,	BY	OAT	50
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295													
310	0.1			0.1				0.2					
325													
330													
340													
355													
SUM	0.1			0.1				0.2					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300,	BY	OAT	60
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295													
310	0.5	0.6	0.3	0.2				1.6					
325													
330													
340													
355													
SUM	0.5	0.6	0.3	0.2				1.6					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300,	BY	OAT	70
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295		0.1		0.1				0.2					
310	0.6	2.8	3.4	4.3	0.6			11.7					
325	0.1							0.1					
330													
340													
355													
SUM	0.7	2.9	3.4	4.4	0.6			12.0					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300,	BY	OAT	80
LESS	10	20	30	40	50	60	70	SUM					
LESS	0.1							0.1					
295													
310	0.2	2.3	3.3	2.8	0.6			9.1					
325	0.1	0.4		0.1				0.5					
330													
340													
355													
SUM	0.4	2.6	3.3	2.9	0.6			9.8					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300,	BY	OAT	90
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295			0.4					0.4					
310	0.1	0.6	2.4	0.8	0.4			4.2					
325		0.4	0.1					0.5					
330													
340													
355													
SUM	0.1	1.0	2.5	1.2	0.4			5.2					

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300, BY DAT	SUM
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS	0.1								0.1		
295		0.1		0.5					0.6		
310	0.9	6.3	9.7	8.2	1.9				27.0		
325	0.2	0.8	0.1	0.1					1.2		
330											
340											
355											
SUM	1.2	7.1	9.8	8.8	1.9				28.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY DAT	60
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310				0.1					0.1		
325											
330											
340											
355											
SUM				0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY DAT	70
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295	0.0								0.0		
310	0.5	0.4	0.3	0.2					1.3		
325	0.2								0.2		
330											
340											
355											
SUM	0.7	0.4	0.3	0.2					1.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY DAT	80
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310			0.4	0.2					0.6		
325											
330											
340											
355											
SUM			0.4	0.2					0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY DAT	90
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295				0.1					0.1		
310		0.1	0.1	0.2					0.4		
325				0.3					0.3		
330											
340											
355											
SUM		0.1	0.1	0.6					0.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY DAT	SUM
LESS	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295	0.0			0.1					0.1		
310	0.5	0.5	0.8	0.7					2.4		
325	0.2			0.3					0.5		
330											
340											
355											
SUM	0.7	0.5	0.8	1.1					3.1		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900,	BY	OAT	70
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310	0.1	0.2	0.5					0.8					
325													
330													
340													
355													
SUM	0.1	0.2	0.5					0.8					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900,	BY	OAT	80
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310	0.1	0.2	0.1					0.4					
325													
330													
340													
355													
SUM	0.1	0.2	0.1					0.4					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900,	BY	OAT	90
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310			0.2					0.2					
325													
330													
340													
355													
SUM			0.2					0.2					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310	0.1	0.1	0.4	0.8				1.4					
325													
330													
340													
355													
SUM	0.1	0.1	0.4	0.8				1.4					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										1500,	BY	OAT	80
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310			0.1					0.1					
325													
330													
340													
355													
SUM			0.1					0.1					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										1500,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	SUM					
LESS 295													
310			0.1					0.1					
325													
330													
340													
355													
SUM			0.1					0.1					

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -2100, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.1					0.1	
310				0.1					0.1	
325										
330										
340										
355										
SUM				0.2					0.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -2100, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.1					0.1	
310				0.1					0.1	
325										
330										
340										
355										
SUM				0.2					0.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.1	0.2						0.3	
325										
330										
340										
355										
SUM		0.1	0.2						0.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.6					0.6	
325										
330										
340										
355										
SUM				0.6					0.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.1	0.2	0.6					0.9	
325										
330										
340										
355										
SUM		0.1	0.2	0.6					0.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.1	0.1				0.2	
325										
330										
340										
355										
SUM				0.1	0.1				0.2	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.2				0.2		
310	0.2	3.0	0.1	0.2				3.5		
325										
330										
340										
355										
SUM	0.2	3.0	0.1	0.4				3.7		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.2						0.2		
325										
330										
340										
355										
SUM		0.2						0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.2				0.2		
310	0.2	3.2	0.2	0.3				3.9		
325										
330										
340										
355										
SUM	0.2	3.2	0.2	0.5				4.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.2	0.3	0.1				0.6		
325										
330										
340										
355										
SUM		0.2	0.3	0.1				0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.2	0.8					1.0		
310	0.8	6.6	4.0	0.7				12.1		
325										
330										
340										
355										
SUM	0.8	6.7	4.8	0.7				13.0		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		1.8	2.1	1.7				5.6		
325										
330										
340										
355										
SUM		1.8	2.1	1.7				5.6		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310				0.7	0.2				0.9	
325										
330										
340										
355										
SUM				0.7	0.2				0.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295			0.2	0.8					1.0	
310		0.8	8.6	7.0	2.7				19.2	
325										
330										
340										
355										
SUM		0.8	8.7	7.8	2.7				20.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310			2.2	2.4	1.0				5.6	
325										
330										
340										
355										
SUM			2.2	2.4	1.0				5.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295			0.8	0.4	0.3				1.5	
310		0.2	11.8	10.6	3.5				26.1	
325										
330										
340										
355										
SUM		0.2	12.6	10.9	3.8				27.5	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310		0.1	2.1	3.7	0.9				6.8	
325										
330										
340										
355										
SUM		0.1	2.1	3.7	0.9				6.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				0.1					0.1	
310			0.4	0.2	0.4				1.0	
325										
330										
340										
355										
SUM			0.4	0.3	0.4				1.1	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-900, BY DAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.8	0.5	0.3				1.6			
310	0.3	16.5	16.9	5.8				39.5			
325											
330											
340											
355											
SUM	0.3	17.3	17.4	6.1				41.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-600, BY DAT	50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			4.3					4.3			
325											
330											
340											
355											
SUM			4.3					4.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-600, BY DAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.1				0.1			
310	0.5	8.5	12.0	1.0				22.0			
325											
330											
340											
355											
SUM	0.5	8.5	12.0	1.1				22.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-600, BY DAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.8	2.6	1.4				4.8			
310	3.3	65.0	61.8	12.2				142.3			
325											
330											
340											
355											
SUM	3.3	65.8	64.4	13.6				147.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-600, BY DAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		0.1	0.6	0.1				0.8			
310	1.0	15.9	19.7	6.2	0.1			43.0			
325											
330											
340											
355											
SUM	1.0	16.0	20.3	6.3	0.1			43.8			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										-600, BY DAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.4	0.6				1.0			
310	0.1	2.0	1.7	2.1				5.9			
325											
330											
340											
355											
SUM	0.1	2.0	2.1	2.7				6.9			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY OAT									SUM
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295		0.9	3.6	2.2				6.7	
310	4.9	91.4	99.5	21.6	0.1			217.5	
325									
330									
340									
355									
SUM	4.9	92.3	103.1	23.7	0.1			224.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT									40
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295									
310			4.8					4.8	
325									
330									
340									
355									
SUM			4.8					4.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT									50
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295		0.6	4.3	0.3				5.5	
310		7.6	26.3	0.7				34.5	
325									
330									
340									
355									
SUM		8.2	30.8	1.0				40.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT									60
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295				0.8				0.8	
310	1.1	69.3	154.3	49.4				274.1	
325									
330									
340									
355									
SUM	1.1	69.3	154.3	50.2				274.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT									70
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295		24.3	33.3	12.0				69.6	
310	14.8	756.7	692.2	107.5				1571.2	
325		3.5						3.5	
330									
340									
355									
SUM	14.8	784.4	725.6	119.5				1644.3	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT									80
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295		4.3	5.7	9.2				19.2	
310	1.7	205.6	293.2	68.5	2.6			571.8	
325		0.2	1.3					1.5	
330									
340									
355									
SUM	1.7	210.0	300.2	77.8	2.6			592.4	

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		1.2	5.9	1.8				8.9		
310	0.1	3.1	28.5	55.8	33.0			120.6		
325			0.7		1.3			2.0		
330										
340										
355										
SUM	0.1	3.1	30.5	61.7	36.1			131.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		30.3	49.5	24.1				104.0		
310	0.1	20.8	1067.8	1226.6	259.2	2.6		2577.0		
325			4.3	1.3	1.3			6.9		
330										
340										
355										
SUM	0.1	20.8	1102.4	1277.4	284.6	2.6		2687.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			2.8	0.2				3.0		
325										
330										
340										
355										
SUM			2.8	0.2				3.0		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.1	3.5	15.5	7.0				26.1		
325										
330										
340										
355										
SUM	0.1	3.5	15.5	7.0				26.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		2.1	1.5	0.8				4.5		
310	0.7	46.5	65.4	13.5				126.0		
325										
330										
340										
355										
SUM	0.7	48.6	66.9	14.3				130.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1	0.1				0.2		
310		13.5	27.4	11.8	0.4			53.2		
325										
330										
340										
355										
SUM		13.5	27.5	11.9	0.4			53.4		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									300,	BY	OAT	90
LESS	10	20	30	40	50	60	70	SUM				
295		0.1	0.1					0.2				
310	0.1	1.3	4.0	3.7				9.1				
325												
330												
340												
355												
SUM	0.1	1.4	4.1	3.7				9.3				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									300,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	SUM				
295		2.2	1.8	0.9				4.9				
310	0.9	64.8	115.0	36.3	0.4			217.4				
325												
330												
340												
355												
SUM	0.9	67.0	116.8	37.2	0.4			222.3				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									600,	BY	OAT	50
LESS	10	20	30	40	50	60	70	SUM				
295			0.3	0.6				0.9				
310												
325												
330												
340												
355												
SUM			0.3	0.6				0.9				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									600,	BY	OAT	60
LESS	10	20	30	40	50	60	70	SUM				
295												
310		0.7	2.5	0.3				3.6				
325												
330												
340												
355												
SUM		0.7	2.5	0.3				3.6				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									600,	BY	OAT	70
LESS	10	20	30	40	50	60	70	SUM				
295		1.5	0.3	0.1				1.9				
310		10.8	10.6	2.5				23.9				
325												
330												
340												
355												
SUM		12.3	10.9	2.6				25.8				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB									600,	BY	OAT	80
LESS	10	20	30	40	50	60	70	SUM				
295				0.5				0.5				
310		1.7	5.0	1.5				8.2				
325												
330												
340												
355												
SUM		1.7	5.0	2.1				8.8				

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.2	0.6	0.8				1.6			
325											
330											
340											
355											
SUM		0.2	0.6	0.8				1.6			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295		1.5	0.3	0.6				2.4			
310		13.4	19.0	5.7				38.2			
325											
330											
340											
355											
SUM		14.9	19.3	6.4				40.6			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1		0.1				0.2			
325											
330											
340											
355											
SUM		0.1		0.1				0.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	0.4	0.5	0.1			1.1			
325											
330											
340											
355											
SUM		0.1	0.4	0.5	0.1			1.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.1					0.1			
310		5.2	9.1	1.5				15.8			
325											
330											
340											
355											
SUM		5.2	9.2	1.5				15.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.9	2.7	2.5				6.1			
325											
330											
340											
355											
SUM		0.9	2.7	2.5				6.1			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.2	0.7	0.8				1.7			
325											
330											
340											
355											
SUM		0.2	0.7	0.8				1.7			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.1					0.1			
310	0.1	6.7	13.0	5.0				24.9			
325											
330											
340											
355											
SUM	0.1	6.7	13.1	5.0				25.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			0.4					0.4			
325											
330											
340											
355											
SUM			0.4					0.4			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		1.5	0.5	0.5				2.5			
325											
330											
340											
355											
SUM		1.5	0.5	0.5				2.5			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			0.6	0.1				0.7			
325											
330											
340											
355											
SUM			0.6	0.1				0.7			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		1.5	1.5	0.6				3.6			
325											
330											
340											
355											
SUM		1.5	1.5	0.6				3.6			

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.1					0.2		
325										
330										
340										
355										
SUM		0.1	0.1					0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.3	0.2	0.1				0.6		
325										
330										
340										
355										
SUM		0.3	0.2	0.1				0.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.4	0.4	0.1				0.9		
325										
330										
340										
355										
SUM		0.4	0.4	0.1				0.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1800, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		

TABLE VIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 2100, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.1	0.1				0.2		
325										
330										
340										
355										
SUM			0.1	0.1				0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 2100, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.2	0.1				0.3		
325										
330										
340										
355										
SUM			0.2	0.1				0.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. SUM, BY RATE OF CLIMB SUM, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295	3.8	0.1						4.3		
310	10.9	3.1	108.0	170.8	79.5	8.1		380.4		
325	49.9	466.9	3565.0	4235.3	1124.1	42.7	0.7	9484.6		
330	9.0	25.8	27.3	16.8	3.9			82.8		
340	0.8	0.5	1.0	0.1				2.4		
355	0.1							0.1		
SUM	74.6	496.3	3701.4	4423.0	1207.9	50.8	0.7	9954.6		

TABLE IX. CYCLIC STEADY VERSUS CYCLIC PEAKS BY COLLECTIVE STEADY (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY 10											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1							1
-10											
10							1				1
20											
SUM				1			1				2
MINS	0.	0.	0.4	0.1	0.4	2.0	0.1	0.	0.	0.	3.0
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY 20											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					1	3					4
20											
SUM					1	3					4
MINS	0.	0.	2.9	18.0	99.4	76.5	2.4	0.	0.	0.	199.8
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY 30											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							1				1
-20					2	2	2	1			7
-10											
10				2	4	2	2				10
20				1							1
30											
SUM				3	6	4	5	1			19
MINS	0.	0.6	122.1	797.9	699.5	127.9	26.8	1.7	0.	0.	1775.5
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20					1	2	6	3			12
-10											
10					1	6	4	1			12
20											
30					1						1
40											
SUM					2	8	10	4			25
MINS	6.3	25.0	420.5	783.9	210.9	98.4	35.3	10.1	0.	0.	1590.6
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY 50											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20						1					1
-10											
SUM						1					1
MINS	6.4	39.4	128.6	52.3	10.3	7.3	1.6	0.	0.	0.	245.9

TABLE X. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ALTITUDE (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20						3	5	2			10
-10					1	3	4	1			9
10					1						1
20											
30											
40											
SUM					2	6	9	3			20
MINS	0.	6.0	16.3	44.8	24.4	79.5	13.4	3.5	0.	0.	187.9

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 1000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							1				1
-20				1	3	2	1				7
-10											
10				1	2	4	1				8
20				1							1
30											
SUM				3	5	6	3				17
MINS	0.	16.2	128.3	324.1	300.7	114.7	32.2	5.9	0.	0.	921.4

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20							2	2			4
-10											
10				1	3	4	2				10
20											
SUM				1	3	4	4	2			14
MINS	12.8	42.0	484.4	1230.9	682.2	118.0	22.4	2.4	0.	0.	2595.1

TABLE XI. CYCLIC STEADY VERSUS CYCLIC PEAKS BY AIRSPEED (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							1				1
-20				1	3	5	8	4			21
-10											
10					2	10	7	1			20
20											
30					1						1
40											
SUM				1	6	15	16	5			43
MINS	0.	0.	0.5	6.8	48.5	152.6	64.6	11.8	0.	0.	284.7

TABLE XI - Continued

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1	2						3
20											
SUM				1	2						3
MINS	0.	0.	0.2	9.7	24.7	56.1	3.4	0.	0.	0.	94.2

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					2	1					3
20				1							1
30											
SUM				1	2	1					4
MINS	0.	0.	2.9	20.9	63.7	56.4	0.	0.	0.	0.	143.9

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 80											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1							1
20											
SUM				1							1
MINS	0.	0.4	50.6	277.8	286.8	5.8	0.	0.	0.	0.	621.4

TABLE XII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE I

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 310											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							1				1
-20				1	3	5	8	4			21
-10											
10				2	6	11	7	1			27
20				1							1
30					1						1
40											
SUM				4	10	16	16	5			51
MINS	12.8	65.6	655.8	1599.6	996.1	283.5	63.8	11.0	0.	0.	3688.2

CYCLIC STEADY VS CYCLIC PEAKS BY RPM SUM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30							1				1
-20				1	3	5	8	4			21
-10											
10				2	6	11	7	1			27
20				1							1
30					1						1
40											
SUM				4	10	16	16	5			51
MINS	12.8	66.1	676.4	1652.8	1021.1	312.2	68.0	11.8	0.	0.	3821.1

TABLE XIII. AIRSPEED ACCELERATION VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE I

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS						13						13
-40						99						99
-30						132	2					134
-20						37	1					38
-10												
10						11						11
20												
SUM						292	3					295

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS						29	5	3	1			38
-40					1	123	17	6	1	1	2	151
-30				2	3	291	16	13	5	2		333
-20				1	7	394	26	2	1			431
-10												
10			3		3	20						26
20						1						1
30												
SUM			3	3	14	858	64	24	4	3	2	980

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS						6						6
-40					2	51	1					54
-30						119						119
-20					5	80	1					86
-10												
10					1	33						34
20						1						1
30												
SUM					8	290	2					300

TABLE XIV. ROTOR RPM VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE I

RPM VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT								
	LESS	295	310	325	330	340	355	SUM
LESS		1	12					13
-40		5	94					99
-30		2	130	2				134
-20		3	33	2				38
-10								
10		1	10					11
20								
SUM		12	279	4				295
MINS	0.	45.4	1071.3	4.7	0.1	0.	0.	1121.4

TABLE XIV - Continued

RPM VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR								
	LESS	295	310	325	330	340	355	SUM
LESS			37	1				38
-40		6	145					151
-30		13	320					333
-20		11	418	2				431
-10								
10		1	24	1				26
20		1						1
30								
SUM		32	944	4				980
MINS	1.3	199.2	5859.3	43.4	1.2	0.1	0.	6104.4

RPM VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT								
	LESS	295	310	325	330	340	355	SUM
LESS			0					6
-40		3	51					54
-30		1	116	2				119
-20		5	78	3				86
-10								
10		3	29	1	1			34
20			1					1
30								
SUM		12	281	6	1			300
MINS	3.0	22.2	982.8	48.0	2.2	0.1	0.	1058.3

RPM VS CYCLIC PEAKS BY MISSION SEGMENT STEADY								
	LESS	295	310	325	330	340	355	SUM
-40								
-30			1					1
-20			21					21
-10								
10			27					27
20			1					1
30			1					1
40								
SUM			51					51
MINS	0.	125.4	3688.1	7.5	0.	0.	0.	3821.0

TABLE XV. AIRSPEED VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE I

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS						1	1	7	12	13						33
-40				5	8	26	27	21	12							99
-30	1	3	1	12	29	31	35	19	5							136
-20	6	2	3	2	8	7	3	5	2							38
-10																
10	11															11
20																
SUM	18	5	4	19	45	65	67	52	27							295
MINS	152.1	74.2	96.5	144.7	211.7	205.5	127.8	74.4	22.2	2.1	0.	0.	0.	0.	0.	1121.4

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS			1			1	1	6	4	6	6		2			39
-40	1	3	1	6	9	17	24	32	23	23	9	1				151
-30	1	7	3	17	52	76	86	49	27	15		1	1			333
-20	41	79	85	61	71	42	25	16	7	2	5					431
-10																
10	8	10	3		2	2			1							25
20	1															1
30																
SUM	52	99	93	94	134	138	145	133	67	41	20	2	3	0.3	0.5	983
MINS	122.9	569.1	620.6	815.3	1159.4	1135.0	783.9	477.5	272.7	106.9	30.3	9.9	3.0	0.3	0.5	6134.9

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT DESCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS							2	2	1	3						6
-40					2	5	11	19	11	4			1	1		54
-30	1	1	1	5	9	25	33	20	11	5	5	1				119
-20	36	3	4	8	9	9	9	2	5	2						86
-10																
10	27	7														34
20	1															1
30																
SUM	65	11	5	13	19	39	52	43	31	15	5	2	1	0.1	0.	303
MINS	85.4	173.2	99.6	172.4	169.7	168.6	157.9	96.1	51.4	26.2	7.2	2.3	1.0	0.1	0.	1058.3

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-40																
-30	1															1
-20	21															21
-10																
10	2	3	3		1											27
20			1													1
30	1															1
40																
SUM	23	3	4		1											51
MINS	284.7	74.2	143.7	292.1	621.4	973.1	731.7	457.3	253.3	98.5	10.5	0.3	0.	0.	0.	3921.1

TABLE XVI. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY CYCLIC STEADY (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											20
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1		1						2
-10											
SUM			1		1						2
MINS	1.9	0.4	2.9	122.1	423.5	128.6	0.	0.	0.	0.	676.4

TABLE XVI - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 30											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				3	1						4
-10											
10			1	2	1						4
20											
SUM			1	5	2						8
MINS	0.	0.1	18.6	797.9	783.9	52.3	0.	0.	0.	0.	1652.8

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30					1						1
-20				2	4						6
-10											
10											
20											
SUM				2	5						7
MINS	0.	0.4	99.4	698.5	211.9	10.3	1.5	0.	0.	0.	1021.1

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 50											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1	1							2
-10											
10			2								2
20											
SUM			3	1							4
MINS	0.	2.0	76.5	127.9	98.4	7.3	0.	0.	0.	0.	312.2

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
10											
20		1									1
30											
SUM		1									1
MINS	1.9	0.1	2.4	26.8	35.3	1.6	0.	0.	0.	0.	68.0

TABLE XVII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY ALTITUDE (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE LESS											
	LESS	10	20	30	40	50	60	70	8	90	SUM
-30											
-20					1						1
-10											
10			1								1
20											
SUM			1		1						2
MINS	0.	0.	14.0	90.4	77.2	6.3	0.	0.	0.	0.	187.9

TABLE XVII - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 1000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40					1						1
-30					4						4
-20			1	2							3
-10											
10			1								1
20											
SUM			2	2	5						9
MINS	1.7	1.3	76.8	547.8	275.2	24.6		0.	0.	0.	921.4

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1	4	1					6
-10											
10				1	2	1					4
20		1									1
30											
SUM		1	2	5	2						11
MINS	2.9	1.6	108.5	1177.3	1177.7	195.3	1.7	0.	0.	0.	2595.1

TABLE XVIII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY AIRSPEED (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1	2	2					5
-10											
10				1	2						3
20		1									1
30											
SUM		1	2	4	2						9
MINS	1.9	0.6	6.4	87.4	175.4	13.0		0.	0.	0.	284.7

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20					1	1					2
-10											
10				1							1
20											
SUM			1	1	1						3
MINS	0.2	0.	22.7	62.3	8.9	0.	0.	0.	0.	0.	94.2

TABLE XVIII - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30					1						1
-20					1						1
-10											
SUM					2						2
MINS	1.3	1.1	45.1	84.5	12.0	0.	0.	0.	0.	0.	143.9
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1		1						2
-10											
SUM			1		1						2
MINS	0.9	0.9	49.4	184.9	45.8	0.2	0.	0.	0.	0.	282.1
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 80											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				2	1						3
-10											
SUM				2	1						3
MINS	0.5	0.	46.0	423.0	151.9	0.	0.	0.	0.	0.	621.4
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 90											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10			1								1
20											
SUM			1								1
MINS	0.	0.4	23.4	514.3	331.2	3.8	0.	0.	0.	0.	873.1
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 110											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1							1
-10											
10					1						1
20											
SUM				1	1						2
MINS	0.	0.	0.5	88.6	314.5	52.2	1.5	0.	0.	0.	457.3

TABLE XIX. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS
BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE I

COLL. STEADY VS COLLECTIVE PEAKS BY RPM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30					1						1
-20			2	6	6						14
-10											
10			3	2	1						6
20		1									1
30											
SUM		1	5	8	8						22
MINS	4.7	3.0	193.2	1739.5	1516.5	229.6	1.7	0.	0.	0.	3688.2

COLL. STEADY VS COLLECTIVE PEAKS BY RPM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30					1						1
-20			2	6	6						14
-10											
10			3	2	1						6
20		1									1
30											
SUM		1	5	8	8						22
MINS	4.7	3.0	199.8	1775.5	1592.5	245.9	1.7	0.	0.	0.	3821.1

TABLE XX. AIRSPEED ACCELERATION VERSUS COLLECTIVE
PEAKS BY MISSION SEGMENT, SAMPLE I

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS												
-40						1						1
-30						1						1
-20					1	13						14
-10												
10					1	29	1					31
20												
SUM					2	44	1					47

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS					1	3						4
-40					7	22	1	1	1			32
-30			2	5	39	127	2	2	1			179
-20	1	1	6	7	61	475	17	3	2	1		574
-10												
10		2	4	8	16	112	9	2				152
20		1	1	2		3						7
30												
SUM	1	4	13	23	124	742	29	8	4	1		948

TABLE XX - Continued

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS				1	2	4						7
-40				3	30	63						96
-30				2	30	148						180
-20					6	69	1					76
-10												
10						6						6
20												
SUM				6	68	290	1					365

TABLE XXI. ROTOR RPM VERSUS COLLECTIVE PEAKS
BY MISSION SEGMENT, SAMPLE I

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT								
	LESS	295	310	325	330	340	355	SUM
LESS								
-40			1					1
-30			1					1
-20			13	1				14
-10								
10		5	26					31
20								
SUM		5	41	1				47
MINS	0.	45.4	1071.3	4.7	0.1	0.	0.	1121.4

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR								
	LESS	295	310	325	330	340	355	SUM
LESS								
-40	1	2	1	3	1			4
-30		2	26	17	1			32
-20		1	167	15	1			179
-10		2	556		1			574
10								
20		23	128	1				152
30			6		1			7
SUM	1	30	877	36	4			948
MINS	1.3	199.2	5859.3	43.4	1.2	0.1	0.	6104.4

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT								
	LESS	295	310	325	330	340	355	SUM
LESS	1		2	1	2	1		7
-40		4	72	19	1			96
-30			149	31				180
-20			68	7	1			76
-10								
10		2	4					6
20								
SUM	1	6	295	58	4	1		365
MINS	3.0	22.2	982.8	48.0	2.2	0.1	0.	1058.3

TABLE XXI - Continued

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY

	LESS	295	310	325	330	340	355	SUM
-40								
-30			1					1
-20			14					14
-10								
10			6					6
20			1					1
30								
SUM			22					22
MINS	0.	125.4	3689.1	7.5	0.	0.	0.	3821.0

TABLE XXII. AIRSPEED VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE I

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT

	LESS	40	60	70	80	90	100	110	12	130	140	150	160	170	180	SUM
LESS																
-40				1												1
-30			1													1
-20		1	4		4	1	4									14
-10																
10	15	1	3				3	6	2	1						31
20																
SUM	15	2	8	1	4	1	7	6	2	1						47
MINS	152.1	84.2	96.5	144.7	211.7	205.5	127.8	74.4	22.2	2.1	0.	0.	0.	0.	0.	1121.6

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVER

	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-40	2	2	7	3	3	4	6	3								32
-30	7	37	43	32	29	14	9	5			1					179
-20	18	101	104	172	98	55	45	21	11	5	2	1				574
-10																
10	18	5	10	12	11	21	22	22	27	9	2	5	1			152
20					1	1	1	1								7
30																
SUM	37	145	164	157	145	155	83	53	4	14	5	5	1			948
MINS	122.6	56.1	52.6	915.0	1154.6	1135.7	793.9	477.5	272.7	15.7	35.3	7.9	3.0	0.3	0.5	6126.9

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCENT

	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-40	4	2	2	1	2	2	2	2								95
-30	5	28	19	12	7	5	7	5			1	1				183
-20	2	19	11	5	17	9	11	5	1							75
-10																
10	3						1			2						5
20																
SUM	14	117	71	24	32	25	24	15	1	3	1					365
MINS	85.4	133.2	88.6	172.4	164.7	163.6	157.9	96.1	51.7	26.2	7.2	2.3	1.0	0.1	0.	1599.3

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY

	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-40																
-30			1													1
-20		2	1	2					1							14
-10																
10	3	1				1		1								5
20	1															1
30																
SUM	4	3	2	2	3	1		2								22
MINS	246.7	46.2	143.9	282.1	621.6	873.1	731.7	457.3	253.0	98.5	10.5	0.3	0.	0.	0.	3921.1

TABLE XXIII. GUST n_z PEAKS FOR μ VERSUS n_z BY MISSION SEGMENT, ALTITUDE, AND C_T/τ , SAMPLE I

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 1000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
SUM					1					1
TIME	19.8	33.0	37.7	100.0	82.9	5.4	0.	0.	0.	278.8

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 1000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
SUM					1					1
TIME	19.6	33.0	37.7	100.0	82.9	5.4	0.	0.	0.	278.8

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2						2				2
0.8										
SUM						2				2
TIME	21.7	20.0	42.3	269.1	336.0	42.8	0.	0.	0.	731.9

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 2000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2						2				2
0.8										
SUM						2				2
TIME	21.8	20.0	42.6	269.3	336.6	42.8	0.	0.	0.	733.1

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 5000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				1						1
0.8										
SUM				1						1
TIME	0.1	0.	2.2	13.4	11.4	0.1	0.	0.	0.	27.1

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 5000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				1						1
0.8										
SUM				1						1
TIME	0.2	0.4	2.9	17.7	11.4	0.1	0.	0.	0.	32.7

TABLE XXIII - Continued

GUST NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT ASCENT						
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2				1	1	2				4
0.8										
SUM				1	1	2				4
TIME	56.9	67.3	99.7	411.8	434.7	51.1	0.	0.	0.	1121.4

GUST NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT MANUVR, ALTITUDE						LESS, CT/S	0.06
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3											
1.2			1							1	
0.8											
SUM			1							1	
TIME	2.5	17.1	92.0	121.1	94.4	2.9	0.	0.	0.	330.0	

GUST NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT MANUVR, ALTITUDE						LESS
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2			1							1
0.8										
SUM			1							1
TIME	2.5	17.1	92.0	121.1	94.4	2.9	0.	0.	0.	330.0

GUST NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT MANUVR, ALTITUDE						1000, CT/S	0.06
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3											
1.2				3	3	1				7	
0.8											
0.7				1						1	
0.6				1						1	
0.5											
SUM				5	3	1				9	
TIME	0.5	8.7	296.0	793.8	513.5	46.4	1.0	0.	0.	1659.9	

GUST NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT MANUVR, ALTITUDE						1000
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2				3	3	1				7
0.8										
0.7				1						1
0.6				1						1
0.5										
SUM				5	3	1				9
TIME	0.5	8.7	296.0	793.8	513.6	46.4	1.1	0.	0.	1660.1

TABLE XXIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000, CT/S LESS										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				1						1
0.8										
SLM				1						1
TIME	0.6	0.2	0.9	7.8	6.8	1.3	0.	0.	0.	17.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						2				2
1.2				4	22	9	3			38
0.8										
0.7				2	10	6	2			20
0.6										
SLM				4	32	17	5			60
TIME	1.2	6.3	179.6	1376.2	1917.6	488.9	21.6	0.0	0.	3991.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						2				2
1.2				5	22	9	3			39
0.8										
0.7				2	10	6	2			20
0.6										
SLM				7	32	17	5			61
TIME	1.8	6.5	180.5	1384.3	1924.8	490.2	21.5	0.0	0.	4009.7

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 5000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
0.7					1	1				2
0.6										
SUM					2	1				3
TIME	0.	0.	1.6	20.6	56.5	18.4	1.2	0.6	0.	98.9

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 5000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
0.7					1	1				2
0.6										
SUM					2	1				3
TIME	0.	0.	1.6	20.6	57.4	18.4	1.2	0.6	0.	99.8

TABLE XXIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						2				2
1.2			1	8	26	10	3			48
0.8										
0.7				3	11	7	2			23
0.6				1						1
0.5										
SLM			1	12	37	19	5			74
TIME	4.7	32.4	570.4	2322.2	2592.1	558.5	23.9	0.6	0.	6104.8

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000, CT/S 0.05										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.3	SUM
1.3										
1.2					3					3
0.8										
0.7			1		2					3
0.6										
SLM			1		5					6
TIME	5.4	17.1	61.2	122.3	108.0	16.5	0.	0.	0.	330.5

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.3	SUM
1.3										
1.2					3					3
0.8										
0.7			1		2					3
0.6										
SLM			1		5					6
TIME	5.0	17.7	62.2	123.0	108.6	16.5	0.	0.	0.	333.6

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S LESS										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.3	SUM
0.8										
0.7							1			1
0.6										
SLM							1			1
TIME	0.6	0.7	1.7	2.2	2.1	1.6	0.7	0.	0.	9.7

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2			1		3	2				6
0.8										
0.7				2		2				4
0.6										
SLM			1	2	3	4				10
TIME	5.4	16.3	43.7	158.7	303.7	91.1	3.5	0.	0.	622.4

TABLE XXIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 2000										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2			1		3	2				6
0.8										
0.7				2		2	1			5
0.6										
SUM			1	2	3	4	1			11
TIME	6.0	16.9	45.5	160.9	305.8	92.7	4.4	0.	0.	632.2

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT DESCNT										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2			1		6	2				9
0.8										
0.7			1	2	2	2	1			8
0.6										
SUM			2	2	8	4	1			17
TIME	14.7	42.1	127.6	316.5	439.4	112.6	5.2	0.	0.	1058.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 1000, CT/S 0.06										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2					7	2				9
0.8										
0.7						3				3
0.6										
SUM					7	5				12
TIME	24.8	68.0	48.8	303.3	399.3	76.8	0.3	0.	0.	921.3

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 1000										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2					7	2				9
0.8										
0.7						3				3
0.6										
SUM					7	5				12
TIME	24.9	68.0	48.8	303.3	399.3	76.8	0.3	0.	0.	921.4

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000, CT/S 0.06										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.4										
1.3						1				1
1.2					4	3				7
0.8										
0.7				1	4	4				9
0.6					1					1
0.5										
SUM				1	9	8				18
TIME	74.0	26.7	13.9	509.5	1571.3	393.5	0.1	0.	0.	2588.9

TABLE XXIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4						1				1
1.3						3				7
1.2					4					
0.8										
0.7				1	4	4				9
0.6					1					1
0.5										
SUM				1	9	8				18
TIME	79.1	27.5	13.9	509.5	1571.3	393.7	0.1	0.	0.	2595.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4						1				1
1.3						5				16
1.2					11					
0.8										
0.7				1	4	7				12
0.6					1					1
0.5										
SUM				1	16	13				30
TIME	147.3	124.9	82.4	856.1	2096.0	514.1	0.4	0.	0.	3821.1

GUST NZ PEAKS FOR MU VS NZ										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4						3				3
1.3						19				77
1.2			2	9	44		3			
0.8										
0.7			1	6	17	16	3			43
0.6				1	1					2
0.5										
SUM			3	15	62	38	6			125
TIME	223.6	266.7	880.0	3906.6	5562.4	1236.3	29.4	0.6	0.	12105.6

TABLE XXIV. GUST n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE I

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2			1												1	
0.8																
SUP			1												1	
TIME	1.2	1.1	.7	1.6	0.3	0.7	1.6	0.7	0.6	0.5	0.	0.	0.	0.	0.	9.0

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.8																
0.7											1				1	
0.6																
SUP											1				1	
TIME	0.7	0.1	.2	0.2	0.4	0.1	0.9	1.0	1.2	0.6	2.0	0.4	0.	0.	0.	7.7

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 6000, ALTITUDE 2000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2			1												1	
0.8																
0.7											1				1	
0.6																
SUP			1								1				2	
TIME	7.3	1.5	1.1	1.8	0.7	1.1	2.8	1.7	1.8	1.1	2.0	0.4	0.	0.	0.	23.3

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 6000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2			1												1	
0.8																
0.7											1				1	
0.6																
SUP			1								1				2	
TIME	6.5	1.6	1.2	1.9	0.9	1.4	3.1	1.7	1.6	1.1	2.0	0.4	0.	0.	0.	25.7

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2						1									1	
0.8																
SUP						1									1	
TIME	2.3	1.0	.6	1.3	0.9	1.2	2.2	0.4	0.	0.	0.	0.	0.	0.	0.	9.9

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2							2								2	
0.8																
SUP							2								2	
TIME	3.7	3.8	3.5	3.2	3.6	1.5	2.2	4.1	2.4	0.	0.	0.	0.	0.	0.	28.0

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2						1									1	
0.8																
0.7								1							1	
0.6																
SUP						1		1							2	
TIME	6.0	0.	0.	0.	0.4	2.0	6.5	1.4	3.7	0.2	0.	0.	0.	0.	0.	20.2

TABLE XXIV - Continued

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3								2	2							4
1.2																
0.8									1							1
0.7																
0.6								2	2	1						5
SUP																
TIME	12.0	5.0	4.2	6.6	19.1	10.1	12.7	6.0	6.1	3.2	0.	0.	0.	0.	0.	73.1

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT MANUVR															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4										1						1
1.3							1				1	2				5
1.2					1											
0.8								1			1					3
0.7																
0.6					1	1	1	1		1	2	2				9
SUP																
TIME	0.9	2.7	5.4	13.0	37.4	47.4	27.5	14.1	9.4	6.8	7.1	3.9	0.7	0.	0.	176.7

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.8																
0.7									1							1
0.6																
SUP									1							1
TIME	0.0	1.0	1.2	2.2	3.5	5.2	7.8	1.4	2.4	2.4	0.	0.	0.	0.	0.	31.9

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT STEADY															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.9																
0.7									1	1						2
0.6																
SUP									1	1						2
TIME	2.06	1.4	0.9	11.3	9.7	16.1	29.7	6.0	3.4	2.7	0.	0.	0.	0.	0.	105.6

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3										1						1
1.2					1		1				1	2				5
0.8								1	2	1	1					6
0.7																
0.6					1	1	1	1	2	2	2	2				12
SUP																
TIME	20.4	7.2	13.7	27.6	52.9	71.6	66.3	23.1	15.9	11.9	7.1	3.9	0.7	0.	0.	327.2

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000, MISSION SEGMENT MANUVR															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2							1									1
0.8																
SUP							1									1
TIME	0.	0.3	0.7	1.0	2.1	2.6	6.2	9.5	1.7	1.3	0.4	0.3	0.5	0.2	0.5	23.6

	GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000															
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2							1									1
0.8																
SUP							1									1
TIME	0.	0.3	0.9	1.0	2.1	2.6	7.8	9.1	4.3	1.4	0.4	0.3	0.5	0.2	0.5	31.9

TABLE XXIV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3										1						1
1.2					1	1	3	2			1	2				10
0.8																
0.7						1		1	3	1	1					7
0.6																
SUM					1	2	3	3	3	2	2	2				18
TIME	42.3	13.9	19.4	36.0	66.7	44.5	87.1	39.8	27.3	13.6	7.4	4.2	1.2	0.2	0.5	442.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		1														1
0.8																
SUM		1														1
TIME	27.6	29.6	15.9	17.0	14.2	5.0	1.1	0.5	0.3	0.2	0.	0.	0.	0.	0.	109.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		1														1
0.8																
SUM		1														1
TIME	79.4	46.9	25.3	29.8	24.2	8.0	9.7	9.2	6.0	0.5	0.	0.	0.	0.	0.	239.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2			2		1	2				1						6
0.9																
0.7					1											1
0.6																
0.5																
SUM			2		2	2				1						7
TIME	36.8	214.7	184.0	179.5	197.7	173.2	73.2	26.9	13.3	6.0	1.1	0.2	0.	0.	0.	1119.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2						1										1
0.8																
0.7		1				1										2
0.6																
SUM		1				2										3
TIME	20.8	31.6	20.2	24.1	35.7	31.0	21.5	9.6	3.5	1.4	0.	0.	0.	0.	0.	201.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2							2	4		2						8
0.8																
0.7								1								1
0.6																
SUM							2	5		2						9
TIME	39.4	41.3	34.0	33.7	56.8	70.9	57.2	49.2	15.7	7.1	0.	0.	0.	0.	0.	385.7

TABLE XXIV - Continued

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 1000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2			2		1	3	2	4		3						15
0.8																
0.7		1				1		1								3
0.6					1											1
0.5																
SUM		1	2		2	4	2	5		3						19
TIME	113.8	279.8	25.1	243.6	297.1	286.1	163.7	89.1	33.6	14.6	1.1	0.2	0.	0.	0.	1773.4

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3										1						1
1.2				2	4	7	5	5	2	1						26
0.8																
0.7			1		1	3	1	4	2	2	1					15
0.6																
SUM			1	2	5	10	6	9	4	4	1					42
TIME	21.9	147.6	224.4	359.3	510.1	514.9	392.5	241.0	123.7	52.5	11.9	3.8	1.3	0.0	0.	2609.3

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2						1	1	3								5
0.8																
0.7			1	1					1							3
0.6																
SUM			1	1		1	1	3	1							9
TIME	24.0	25.0	27.7	29.2	60.7	69.2	64.4	41.6	22.1	9.9	1.3	0.8	0.4	0.1	0.	372.3

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2						2	1	1	1							5
0.8																
0.7					1	1	1		2							5
0.6								1								1
0.5																
SUM					1	3	2	2	3							11
TIME	34.2	12.9	24.1	78.8	202.6	327.3	232.4	147.8	78.6	25.5	1.2	0.	0.	0.	0.	1175.5

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 2000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3										1						1
1.2				2	4	10	7	9	3	1						36
0.8																
0.7			2	1	2	4	2	4	5	2	1					23
0.6								1								1
0.5																
SUM			2	3	6	14	9	14	8	4	1					61
TIME	111.6	201.0	301.3	502.1	821.5	947.4	704.1	441.2	227.1	89.6	14.4	4.6	1.7	0.1	0.	4356.6

GUST WZ PEAKS FOR VELOCITY VS WZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2					1											1
0.8																
SUM					1											1
TIME	0.	1.5	5.2	1.0	2.1	2.3	1.4	0.1	0.	0.	0.	0.	0.	0.	0.	13.7

TABLE XXIV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.8																
0.7							1								1	
0.6																
SUM							1								1	
TIME	0.3	0.9	1.7	5.0	10.6	11.3	13.7	12.4	1.5	0.8	0.2	0.1	0.	0.	0.	58.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2					1										1	
0.8																
0.7							1								1	
0.6																
SUM					1		1								2	
TIME	0.3	2.4	6.9	9.2	23.3	32.8	39.8	33.3	5.1	1.5	0.2	0.1	0.	0.	0.	154.9

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																
1.3									1						1	
1.2		1	2	2	6	13	9	13	3	4					53	
0.8																
0.7		1	2	1	2	5	2	6	5	2	1				27	
0.6					1			1							2	
0.5																
SUM		2	4	3	9	18	11	20	8	7	1				83	
TIME	294.8	530.9	584.9	784.9	1168.8	1274.4	917.3	572.8	271.8	105.2	15.7	4.9	1.7	0.1	0.	6528.2

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2							1								1	
0.8																
0.7			1												1	
0.6																
SUM			1				1								2	
TIME	5.1	87.6	87.2	83.7	96.0	81.8	49.7	22.1	6.7	4.0	1.5	0.0	0.	0.	0.	525.6

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.8																
0.7							1								1	
0.6																
SUM							1								1	
TIME	10.0	16.3	12.6	15.3	17.6	12.7	8.9	6.1	1.9	0.2	0.1	0.	0.	0.	0.	101.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.8																
0.7								1							1	
0.6																
SUM								1							1	
TIME	55.7	29.4	36.8	67.8	113.4	106.5	56.7	29.6	16.1	2.6	0.7	0.3	0.	0.	0.	515.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2							1								1	
0.8																
0.7			1			1			1						3	
0.6																
SUM			1			1	1		1						4	
TIME	115.6	152.8	160.0	196.3	255.3	230.8	134.1	62.9	27.7	6.8	2.3	0.3	0.	0.	0.	1345.0

TABLE XXIV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2								2							2
0.8															
SUP								2							2
TIME	35.9	17.1	31.1	61.2	109.7	116.8	79.2	52.2	14.8	0.9	0.	0.	0.	0.	519.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT MANUVR															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2				1		2	2	2							7
0.3															
0.7						1	1								2
0.6															
SUP				1		3	3	2							9
TIME	7.1	40.0	67.3	127.0	245.1	243.5	185.9	146.1	110.3	32.1	8.2	1.6	0.5	0.	1214.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2		1													1
0.8															
SUP		1													1
TIME	7.9	9.7	11.4	16.6	34.0	39.5	41.7	26.2	16.3	11.5	3.5	1.0	0.	0.	220.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT STEADY															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4															
1.3								1							1
1.2								1	1						2
0.8															
0.7							1	1							2
0.6															
SUP							1	3	1						5
TIME	42.2	8.8	25.7	76.5	215.5	312.3	263.1	179.9	116.6	57.6	8.7	0.	0.	0.	1308.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4															
1.3								1							1
1.2		1			1		2	3	5						12
0.8															
0.7							2	2							4
0.6															
SUP		1			1		4	6	5						17
TIME	90.1	75.7	137.4	281.3	603.6	712.1	571.9	404.3	258.0	102.2	20.4	2.6	0.5	0.	3263.1

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT MANUVR															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.8															
0.7									1						1
0.6															
SUP									1						1
TIME	0.	0.4	0.6	0.7	1.4	3.4	3.0	2.5	3.1	2.4	0.	0.	0.	0.	17.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000															
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.8															
0.7									1						1
0.6															
SUP									1						1
TIME	0.9	1.9	3.2	6.4	14.0	15.6	15.1	13.7	9.3	3.0	0.2	0.1	0.6	0.	84.0

TABLE XXIV - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4								1								1
1.3								3	5							13
1.2		1			1		2	2	2							8
0.8			1			1	2	2	2							8
0.7																
0.6																
SUM		1	1		1	1	5	6	7							22
TIME	299.3	303.4	344.2	521.6	923.7	1021.9	761.9	492.0	298.7	183.8	22.9	3.0	1.1	0.	0.	5109.6

GUST NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4								1		2						3
1.3								18	8	4	1	2				77
1.2		2	2	3	8	14	15	18	8	4	1	2				77
0.8																
0.7		1	3	1	2	7	4	9	10	3	2	1				43
0.6					1			1								2
0.5																
SUM		3	5	4	11	21	15	29	18	9	3	3				125
TIME	044.9	049.8	049.6	1344.3	2159.5	2392.2	1771.4	1105.3	599.6	233.7	44.0	12.5	4.0	0.4	0.5	12105.7

TABLE XXV. MANEUVER n_z PEAKS FOR μ VERSUS n_z BY MISSION SEGMENT, ALTITUDE, AND C_T/σ , SAMPLE I

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1				1
1.2					1	1				2
0.8										
SUM					1	1	1			3
TIME	15.1	13.9	15.9	23.2	3.9	2.7	0.	0.	0.	74.7

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1				1
1.2					1	1				2
0.8										
SUM					1	1	1			3
TIME	15.1	13.9	15.9	23.2	3.9	2.7	0.	0.	0.	74.7

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 1000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3					2	1				3
1.2			1	4	10	1				16
0.8										
0.7					3	1				4
0.6										
SUM			1	7	12	3				23
TIME	19.8	33.0	37.7	100.0	82.9	5.4	0.	0.	0.	278.8

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT,	ALTITUDE	1000			
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4					2	1				3
1.3			1	4	10	1				16
1.2										4
0.8				3		1				
0.7										23
0.6			1	7	12	3				
SUM										
TIME	19.8	33.0	37.7	100.0	82.9	5.4	0.	0.	0.	278.8

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S LESS										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3			1							1
1.2										1
0.8			1							
SUM										1.3
TIME	0.1	0.	0.3	0.2	0.6	0.	0.	0.	0.	

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7					1					1
1.6										5
1.5					5					13
1.4				3	9	1				73
1.3				32	33	5				6
1.2		1	2							98
0.8			1	1	3	1				
0.7										
0.6			3	36	51	7				
SUM		1								731.9
TIME	21.7	20.0	42.3	269.1	336.0	42.8	0.	0.	0.	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7					1					1
1.6										5
1.5					5					13
1.4				3	9	1				74
1.3			1	3	32	33	5			6
1.2										99
0.8				1	1	3	1			
0.7										
0.6			1	4	36	51	7			
SUM			1							733.1
TIME	21.8	20.0	42.6	269.3	336.6	42.8	0.	0.	0.	

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT ASCENT					
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7										
1.6					1					1
1.5										
1.4					5					5
1.3				3	11	3				17
1.2		1	4	37	44	6				92
0.8										
0.7			1	4	3	2				10
0.6										
SUM		1	5	44	64	11				125
TIME	56.9	67.3	99.7	411.8	434.7	51.1	0.	0.	0.	1121.4

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT MANUVR,	ALTITUDE	LESS, CT/S	0.06	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35
1.8									
1.7						1			
1.6					2	1			
1.5				7	5	1			
1.4			3	9	9				
1.3			6	24	14	1			
1.2		1	18	37	46				
0.8									
0.7						1			
0.6			1						
0.5									
SUM		1	28	77	76	5			
TIME	2.5	17.1	92.0	121.1	94.4	2.9	0.	0.	0.

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT MANUVR,	ALTITUDE	LESS	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30
1.8								
1.7						1		
1.6					2	1		
1.5				7	5	1		
1.4			3	9	9			
1.3			6	24	14	1		
1.2		1	18	37	46			
0.8								
0.7						1		
0.6			1					
0.5								
SUM		1	28	77	76	5		
TIME	2.5	17.1	92.0	121.1	94.4	2.9	0.	0.

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MANUVR,	ALTITUDE	1000, CT/S	0.06	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
2.4					1					1
2.2						3				3
2.0				1	1	4	2			8
1.8				3	13	8	2			26
1.7				7	7	5				19
1.6			2	9	7					18
1.5			2	27	20	3				47
1.4			6	55	52	7	1			121
1.3		1	31	121	76	11				240
1.2		2	100	300	192	17				611
0.8										
0.7			4	9	5	2				20
0.6				1	1	1				3
0.5					1	1				2
0.4										
0.2						1				1
LESS										
SUM		3	145	529	376	63	5			1120
TIME	0.5	8.7	296.0	793.8	513.5	46.4	1.0	0.	0.	1659.9

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	1000	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
2.4					1					1
2.2						3				3
2.0				1	1	4	2			8
1.8				3	13	8	2			26
1.7				7	7	5				19
1.6			2	9	7					18
1.5			2	22	20	3				47
1.4			6	55	52	7	1			121
1.3		1	31	121	76	11				240
1.2		2	100	300	192	17				611
0.8										
0.7			4	9	5	2				20
0.6				1	1	1				3
0.5					1	1				2
0.4										
0.2						1				1
LESS										
SUM		3	145	529	376	63	5			1120
TIME	0.5	8.7	296.0	793.8	513.6	46.4	1.1	0.	0.	1660.1

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	LESS	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
2.2										
2.0				1		1				2
1.8										
1.7										
1.6					1	2				3
1.5				1						1
1.4			1	3						4
1.3		1		3	1	1				6
1.2				2	3					5
0.8										
0.7					1					1
0.6										
SUM		1	1	10	6	4				22
TIME	0.6	0.2	0.9	7.8	6.8	1.3	0.	0.	0.	17.6

TABLE XXV - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4				1	2	4				7	
2.2					8	3	3			14	
2.0					9	8	3			20	
1.8				4	23	21	13	1		62	
1.7				7	27	18	5			57	
1.6			1	21	41	26	4			93	
1.5			1	39	69	39	9			157	
1.4			13	102	118	68	6			307	
1.3			29	210	249	105	5			598	
1.2			58	391	722	285	9			1465	
0.8											
0.7	1	2	9	50	65	25				152	
0.6	1	1	4	11	19	7	1			44	
0.5		1	1	3	9					14	
0.4	2	1	2	2	1					8	
0.2			1							1	
LESS							1			1	
SUM	4	5	119	841	1362	609	59	1		3000	
TIME	1.2	5.3	179.6	1376.2	1917.6	488.9	21.6	0.0	0.	3941.3	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.09
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.5											
1.4					1					1	
1.3											
1.2											
0.8											
0.7				1	1					2	
0.6											
SUM				1	2					3	
TIME	0.	0.	0.	0.4	0.4	0.	0.	0.	0.	0.7	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000	
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4				1	2	4				7	
2.2					8	3	3			14	
2.0				1	9	9	3			22	
1.8				4	23	21	13	1		62	
1.7				7	27	18	5			57	
1.6			1	21	42	28	4			96	
1.5			1	40	69	39	9			158	
1.4			14	105	119	68	6			312	
1.3		1	29	213	250	106	5			604	
1.2			58	393	725	285	9			1470	
0.8											
0.7	1	2	9	51	67	25				155	
0.6	1	1	4	11	19	7	1			44	
0.5		1	1	3	9					14	
0.4	2	1	2	2	1					8	
0.2			1							1	
LESS							1			1	
SUM	4	6	120	852	1370	613	59	1		3025	
TIME	1.8	6.5	180.5	1384.3	1924.8	490.2	21.6	0.0	0.	4009.7	

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	5000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7										
1.6						1				1
1.5						1	1			2
1.4					3	1		1		5
1.3				1	5	3	2			11
1.2				3	13	10	1			27
0.8										
0.7			2	2	8					12
0.6			1		2					3
0.5					1					1
0.4										
0.2										
LESS				1						1
SUM			3	7	32	16	4	1		63
TIME	0.	0.	1.6	20.6	56.5	18.4	1.2	0.6	0.	98.9

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	5000	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7										
1.6						1				1
1.5						1	1			2
1.4					3	1		1		5
1.3				1	5	3	2			11
1.2				3	13	10	1			27
0.8										
0.7			2	2	8					12
0.6			1		2					3
0.5					1					1
0.4										
0.2										
LESS				1						1
SUM			3	7	32	16	4	1		63
TIME	0.	0.	1.6	20.6	57.4	18.4	1.2	0.6	0.	99.8

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	10000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
0.7										
0.6			1							1
0.5										
SUM			1							1
TIME	0.	0.	0.3	1.2	0.9	0.7	0.	0.	0.	3.0

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	10000	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
0.7										
0.6			1							1
0.5										
SUM			1							1
TIME	0.	0.	0.3	2.4	1.8	0.7	0.	0.	0.	5.2

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT MANUVR						
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4				1	3	4				8	
2.2					8	6	3			17	
2.0				2	10	13	5			30	
1.8				7	36	29	15	1		88	
1.7				14	34	24	5			77	
1.6			3	30	51	30	4			118	
1.5			3	69	94	44	10			220	
1.4			23	169	183	76	7	1		459	
1.3		2	66	359	345	121	7			900	
1.2		3	176	733	976	312	10			2210	
0.8											
0.7	1	2	15	62	80	28				188	
0.6	1	1	7	12	22	8	1			52	
0.5		1	1	3	11	1				17	
0.4	2	1	2	2	1					8	
0.2			1			1				2	
LESS				1			1			2	
SUM	4	10	297	1464	1854	697	68	2		4396	
TIME	4.7	32.4	570.4	2322.2	2592.1	558.5	23.9	0.6	0.	6104.8	

MANEUVER	NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT DESCNT, ALTITUDE					LESS, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.5											
1.4					1					1	
1.3				1						1	
1.2			3	4	4					11	
0.8											
SUM			3	5	5					13	
TIME	3.2	7.3	19.9	26.5	13.4	0.5	0.	0.	0.	70.7	

MANEUVER	NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT DESCNT, ALTITUDE					LESS	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.5											
1.4					1					1	
1.3				1						1	
1.2			3	4	4					11	
0.8											
SUM			3	5	5					13	
TIME	3.2	7.5	19.9	26.5	13.4	0.5	0.	0.	0.	70.9	

MANEUVER	NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT DESCNT, ALTITUDE					1000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3											
1.2				1	1					2	
0.8											
SUM				1	1					2	
TIME	0.2	0.4	0.9	0.7	0.6	0.	0.	0.	0.	2.7	

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.6										
1.5					1					1
1.4				1	2	2				5
1.3			1	3	4	1				9
1.2			5	15	24	5				49
0.8										
0.7					2	3				5
0.6						1				1
0.5						1				1
0.4						2				2
0.2										
SUM			6	19	33	15				73
TIME	5.4	17.1	61.2	122.3	108.0	16.5	0.	0.	0.	330.5

MANEUVER	NZ PEAKS FOR				MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35			SUM
1.6												
1.5					1							1
1.4				1	2	2						5
1.3			1	3	4	1						9
1.2			5	16	25	5						51
0.8												
0.7					2	3						5
0.6						1						1
0.5						1						1
0.4						2						2
0.2												
SUM			6	20	34	15						75
TIME	5.6	17.7	62.2	123.0	108.6	16.5	0.	0.	0.			333.6

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.5										
1.4						1				1
1.3			1							1
1.2			1	1			1			3
0.8										
SUM			2	1		1	1			5
TIME	0.5	0.7	1.7	2.2	2.1	1.6	0.9	0.	0.	9.7

TABLE XXV - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.8										
1.7				1	1					2
1.6										
1.5			1	1	1	1	1			5
1.4				1	6					7
1.3				11	19	4				34
1.2			10	23	40	18	3			94
0.8										
0.7				7	16	4				27
0.6					1					1
0.5						3				3
0.4					1	1				2
0.2					1	1				2
LESS										
SUM			11	44	86	32	4			177
TIME	5.4	16.3	43.7	158.7	303.7	91.1	3.5	0.	0.	622.4

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.8										
1.7					1	1				2
1.6										
1.5			1		1	1	1			5
1.4					1	6	1			8
1.3			1		11	19	4			35
1.2			11		24	40	18	4		97
0.8										
0.7					7	16	4			27
0.6						1				1
0.5							3			3
0.4						1	1			2
0.2						1	1			2
LESS										
SUM				13	45	86	33	5		182
TIME	6.0	16.9	45.5	160.9	305.8	92.7	4.4	0.	0.	632.2

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2						1				1
0.8										
SUM						1				1
TIME	0.	0.	0.	5.2	11.8	2.8	0.8	0.	0.	20.6

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.09
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
0.7										
0.6				1						1
0.5										
SUM				1						1
TIME	0.	0.	0.	1.0	0.	0.	0.	0.	0.	1.0

TABLE XXV - Continued

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3											
1.2						1				1	
0.8											
0.7											
0.6				1						1	
0.5											
SUM				1		1				2	
TIME	0.	0.	0.	6.2	11.8	2.8	0.8	0.	0.	21.6	

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.8											
1.7					1	1				2	
1.6											
1.5			1	1	2	1	1			6	
1.4				2	4	3				14	
1.3			2	15	23	5				45	
1.2			19	44	69	24	4			160	
0.8											
0.7				7	18	7				32	
0.6				1	1	1				3	
0.5						4				4	
0.4					1	3				4	
0.2					1	1				2	
LESS											
SUM			22	71	125	49	5			272	
TIME	14.7	42.1	127.6	316.5	439.6	112.6	5.2	0.	0.	1058.3	

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	LESS, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.4												
1.3					1					1		
1.2			3	1	7	1				12		
0.8												
SUM			3	1	8	1				13		
TIME	43.2	29.4	19.7	32.6	49.9	13.0	0.	0.	0.	187.9		

MANEUVER	NZ	PEAKS	FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	LESS	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.4												
1.3					1					1		
1.2			3	1	7	1				12		
0.8												
SUM			3	1	8	1				13		
TIME	43.2	29.4	19.7	32.6	49.9	13.0	0.	0.	0.	187.9		

TABLE XXV - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.6											
1.5					1					1	
1.4											
1.3				1	1	4				6	
1.2			1	13	25	9				48	
0.8											
0.7					1					1	
0.6											
SUM			1	14	28	13				56	
TIME	24.8	68.0	48.8	303.3	399.3	76.8	0.3	0.	0.	921.3	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	1000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.6										
1.5					1					1
1.4										
1.3				1	1	4				6
1.2			1	13	25	9				48
0.8										
0.7					1					1
0.6										
SUM			1	14	28	13				56
TIME	24.9	68.0	48.8	303.3	399.3	76.8	0.3	0.	0.	921.4

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000, CT/S	LESS
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3											
1.2	1									1	
0.8											
0.7	2									2	
0.6											
SUM	3									3	
TIME	5.1	0.8	0.	0.	0.	0.	0.	0.	0.	6.0	

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000, CT/S	0.06
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.7											
1.6				1						1	
1.5											
1.4					2					2	
1.3					6					6	
1.2			1	18	46	23				88	
0.8											
0.7				1	4	5				10	
0.6											
SUM			1	20	58	28				107	
TIME	74.0	26.7	13.9	509.5	1571.3	393.5	0.1	0.	0.	2588.0	

TABLE XXV - Continued

MANEUVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	STEADY,	ALTITUDE	2000
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7										
1.6				1						1
1.5										
1.4					2					2
1.3					6					6
1.2	1		1	18	46	23				89
0.8										
0.7	2			1	4	5				12
0.6										
SUM	3		1	20	58	28				110
TIME	79.1	27.5	13.9	509.5	1571.3	393.7	0.1	0.	0.	2595.1

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	5000, CT/S	0.06	
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1				1
1.2					2	1				3
0.8										
SUM					2	2				4
TIME	0.	0.	0.	10.7	74.5	26.1	0.	0.	0.	111.3

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY,	ALTITUDE	5000		
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1				1
1.2					2	1				3
0.8										
SUM					2	2				4
TIME	0.	0.	0.	10.7	75.4	30.6	0.	0.	0.	116.7

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION SEGMENT	STEADY				
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.7										
1.6				1						1
1.5					1					1
1.4					2					2
1.3				1	8	5				14
1.2	1		5	32	80	34				152
0.8										
0.7	2			1	5	5				13
0.6										
SUM	3		5	35	96	44				183
TIME	147.3	124.9	82.4	856.1	2096.0	514.1	0.4	0.	0.	3821.1

TABLE XXV - Continued

MANEUVER NZ PEAKS FOR MU VS NZ										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
2.4				1	3	4				8
2.2					8	6	3			17
2.0				2	10	13	5			30
1.8				7	36	29	15	1		88
1.7				15	35	24	5			79
1.6			3	31	52	30	4			120
1.5			4	70	97	45	11			227
1.4			23	171	199	79	7	1		480
1.3		2	68	378	387	134	7			976
1.2	1	4	204	846	1169	376	14			2614
0.8										
0.7	3	2	16	74	106	42				243
0.6	1	1	7	13	23	9	1			55
0.5		1	1	3	11	5				21
0.4	2	1	2	2	2	3				12
0.2			1		1	2				4
LESS				1			1			2
SUM	7	11	329	1614	2139	801	73	2		4976
TIME	223.6	266.7	880.0	3906.6	5562.4	1236.3	29.4	0.6	0.	12105.6

TABLE XXVI. MANEUVER n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE I

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 1000, MISSION SEGMENT DESCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3					1	1										
1.2																2
0.8					1	1										
SUM					1	1										2
TIME	1.1	0.2	0.2	0.1	0.2	0.3	0.3	0.	0.	0.	0.	0.	0.	0.	0.	2.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 1000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3					1	1										
1.2																2
0.8					1	1										
SUM					1	1										2
TIME	1.2	0.2	0.2	0.1	0.2	0.3	0.3	0.	0.	0.	0.	0.	0.	0.	0.	2.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		1														1
0.8																
SUM		1														1
TIME	0.2	0.2	0.1	0.0	0.0	0.3	0.3	0.	0.	0.	0.	0.	0.	0.	0.	1.3

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0								1							1	
1.8																
1.7																
1.6								2							2	
1.5																
1.4		1													1	
1.3	1				1		1			1					4	
1.2			1	2		2									5	
0.8																
0.7							1								1	
0.6																
SUM	1	1	1	2	1	2	2		3	1					14	
TIME	1.2	1.1	0.7	1.6	0.3	0.7	1.6	0.7	0.6	2.5	0.	0.	0.	0.	0.	9.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.5																
1.4									1						1	
1.3										1					1	
1.2										1	1				2	
0.8																
SUM									1	2	1				4	
TIME	0.7	0.1	0.2	0.2	0.4	0.1	0.9	1.0	1.2	0.6	2.0	0.4	0.	0.	0.	7.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2	1														1	
0.8																
0.7	2														2	
0.6																
SUM	3														3	
TIME	3.2	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.2	

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000, ALTITUDE 2000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0								1							1	
1.8																
1.7																
1.6								2							2	
1.5																
1.4		1								1					2	
1.3	1				1		1			1	1				5	
1.2	1	1	1	2		2			1		1	1			9	
0.8																
0.7	2						1								3	
0.6																
SUM	4	2	1	2	1	2	2		3	2	2	1			22	
TIME	7.3	1.9	1.1	1.8	0.7	1.1	2.6	1.7	1.8	1.1	2.0	0.4	0.	0.	0.	23.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 6000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0								1							1	
1.8																
1.7																
1.6								2							2	
1.5																
1.4		1								1					2	
1.3	1				1		1			1	1				5	
1.2	1	1	1	2	1	3				1	1	1			11	
0.8																
0.7	2						1								3	
0.6																
SUM	4	2	1	2	2	3	2		3	2	2	1			24	
TIME	8.9	1.6	1.2	1.9	0.9	1.4	3.1	1.7	1.3	1.1	2.0	0.4	0.	0.	0.	25.7

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2					1	2										3
C.8					1	2										3
SUP																
TIME	2.3	1.0	.6	1.3	0.9	1.2	2.2	0.4	0.	0.	0.	0.	0.	0.	0.	9.9
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0							1									1
1.8						2										2
1.7																
1.6																
1.5																
1.4					1	1										2
1.3					2											2
1.2					6											6
0.8																
0.7																
0.6			1													1
0.5																
SUP			1	1	8	3	1									14
TIME	.0	0.2	.1	2.1	5.1	5.4	1.5	0.1	0.	0.	0.	0.	0.	0.	0.	15.0
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.5																
1.4							2									2
1.3		1			1	1	2	1								2
1.2																5
0.8																
0.7							1									1
0.6																
SUP		1	1			1	1	5	1							10
TIME	3.7	3.8	3.5	3.2	3.6	1.5	2.2	4.1	2.4	0.	0.	0.	0.	0.	0.	28.0
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																
1.3							1									1
1.2																
SUP							1									1
TIME	6.0	0.	.0	0.	0.4	2.0	6.5	1.4	3.7	0.2	0.	0.	0.	0.	0.	20.2
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0							1									1
1.8						2										2
1.7																
1.6																
1.5																
1.4					1	1	2									4
1.3					3	1	1									5
1.2		1	1		7	3	2	1								14
0.8																
0.7							1									1
0.6				1												1
0.5																
SUP		1	1	1	1	10	6	7	1							28
TIME	12.0	5.0	4.2	6.6	10.1	10.1	12.7	6.0	6.1	0.2	0.	0.	0.	0.	0.	73.1

TABLE XXVI - Continued

		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
		LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4							1										1
1.3							1			1							3
1.2				1													
0.8																	
SUM				1			2			1							4
TIME	0.9	1.2	1.0	1.2	2.4	3.0	1.4	1.5	0.6	0.	0.	0.	0.	0.	0.	0.	13.1
		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT MANUVR															
		LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4								1	1	1							2
2.2								1	1				1				3
2.0					1				1	1			1				4
1.8							1		1		2	2	2				8
1.7									3	1		1					5
1.6							1	1		1		1					4
1.5					2	2	1		1	2	1						9
1.4				1	2	5		2		4	3		1		1		19
1.3					1	5	4		4	1	3	2	1				21
1.2					1	7	12	5	4	1	1	1	1				37
0.8																	
0.7	1		2	2		2		3		1							11
0.6		1		2		1				1							5
0.5																	
0.4	1	1															2
0.2																	
SUP	2	2	3	11	19	22	13	19	14	10	7	7	1				130
TIME	0.9	2.7	5.0	13.0	37.4	47.4	27.5	14.1	9.4	6.8	7.1	3.9	0.7	0.	0.		176.7
		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
		LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																	
1.3			1			1											2
1.2			1		2		1		1	1							6
0.8																	
0.7						1	1										2
0.6																	
SUP		2		2	2	2		1	1								10
TIME	3.0	1.0	1.2	2.2	3.5	5.2	8.8	1.4	2.4	2.4	0.	0.	0.	0.	0.	0.	31.9
		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT STEADY															
		LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																	
1.2				1	1												2
0.8																	
SUP				1	1												2
TIME	20.6	1.4	5.0	11.3	9.7	16.1	28.7	6.0	3.4	2.7	0.	0.	0.	0.	0.	0.	105.6
		MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 2000															
		LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4								1	1	1							2
2.2								1	1				1				3
2.0					1				1	1			1				4
1.8							1		1		2	2	2				8
1.7									3	1		1					5
1.6								1	1	1		1					4
1.5					2	2	1		1	2	1						9
1.4				1	2	5		2		4	3		1		1		19
1.3			1		1	6	5		4	1	3	2	1				24
1.2			1	2	4	7	14	9	5	3	1	1	1				40
0.8																	
0.7	1		2	2	1	3		3		1							13
0.6		1		2		1				1							5
0.5																	
0.4	1	1															2
0.2																	
SUM	2	4	5	14	21	26	13	20	16	10	7	7	1				146
TIME	25.4	7.2	13.7	27.6	52.9	71.6	66.3	23.1	15.9	11.9	7.1	3.9	0.7	0.	0.		327.2

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.7																
1.6									1						1	
1.5																
1.4																
1.3					1		1	1	1		1	1		1	1	
1.2						2	1	1	1	1	1				6	
0.8															7	
0.7							1								1	
0.6					1										1	
0.5																
SUM					2	2	3	2	3	1	2	1		1	17	
TIME	0.	0.3	0.9	1.0	2.1	2.6	6.2	5.5	1.8	1.3	0.4	0.3	0.5	0.2	0.5	23.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.7																
1.6									1						1	
1.5																
1.4																
1.3					1		1	1	1		1	1		1	1	
1.2						2	1	1	1	1	1				6	
0.8															7	
0.7							1								1	
0.6					1										1	
0.5																
SUM					2	2	3	2	3	1	2	1		1	17	
TIME	0.	0.3	0.9	1.0	2.1	2.6	7.8	9.1	4.9	1.4	0.4	0.3	0.5	0.2	0.5	31.9

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 10000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.7																
0.6		1													1	
0.5																
SUM		1													1	
TIME	0.	0.3	0.2	0.7	0.7	0.1	0.2	0.5	0.3	0.1	0.	0.	0.	0.	0.	3.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 10000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
0.7																
0.6		1													1	
0.5																
SUM		1													1	
TIME	0.	0.3	0.2	0.7	0.7	0.1	0.2	0.5	0.3	0.1	0.	0.	0.	0.	0.	3.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4							1	1							2	
2.2							1	1			1				3	
2.0							2	1			1				5	
1.8			1				1		2	2	2				10	
1.7							3	1		1					5	
1.6							1	1	1	1					5	
1.5				2	2		1	2	1						9	
1.4			1	2	6		3	2	4	3		1	1		24	
1.3		1	1	1	6		9	6	2	4	2	2			35	
1.2		2	2	4	7		21	14	5	2	2	2	1		69	
0.8																
0.7	1		2	2	1		3	5	1						15	
0.6		2		3			2	1							8	
0.5																
0.4	1	1													2	
0.2																
SUM	2	6	6	15	22	38	21	30	19	13	8	9	2		1	192
TIME	42.3	13.9	19.4	36.0	66.0	84.5	87.1	38.8	27.3	13.6	7.4	4.2	1.2	0.2	0.5	442.3

TABLE XXVI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	LESS, MISSION SEGMENT ASCENT								SUM
	LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180			
1.4																		
1.3								1										1
1.2								1										1
SUP																		
TIME	10.0	5.4	1.4	1.7	2.4	0.3	0.5	2.2	0.2	0.3	0.	0.	0.	0.	0.			25.0

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	LESS, MISSION SEGMENT MANUVR								SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180			
1.7																		
1.6									1									1
1.5																		
1.4					1	1												2
1.3		2		2	2	1												7
1.2	1	11	4	10	4	4												34
0.8																		
SUM	1	13	4	12	7	6			1									44
TIME	27.6	29.6	13.0	17.0	14.2	5.0	1.1	0.5	0.3	0.2	0.	0.	0.	0.	0.			109.3

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	LESS, MISSION SEGMENT DESCNT								SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180			
1.3																		
1.2	1	2	2	1	1		1											8
0.8																		
SUP	1	2	2	1	1		1											8
TIME	9.2	0.6	5.4	6.5	6.3	1.0	3.4	0.1	0.2	0.	0.	0.	0.	0.	0.			41.7

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	LESS, MISSION SEGMENT STEADY								SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180			
1.4																		
1.3							1											1
1.2		1					1	1	1									4
0.8																		
SUM		1					2	1	1									5
TIME	31.0	3.3	4.5	4.7	1.2	0.9	4.1	6.5	5.3	0.	0.	0.	0.	0.	0.			62.3

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	LESS								SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180			
1.7																		
1.6									1									1
1.5																		
1.4					1	1												2
1.3		2		2	2	1	1	1										9
1.2	2	14	6	11	5	4	2	1	1									46
0.8																		
SUM	2	16	6	13	8	6	3	2	2									98
TIME	79.6	46.9	25.3	29.8	24.2	8.0	9.7	9.2	6.0	0.5	0.	0.	0.	0.	0.			239.1

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		8000,	ALTITUDE	1000, MISSION SEGMENT ASCENT								SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180			
1.4																		
1.3						1				1								2
1.2		1		1	1	2	2		1									8
0.8																		
0.7				1					1									2
0.6																		
SUM		1		2	1	3	2		2	1								12
TIME	15.0	12.1	5.9	6.3	7.6	11.0	6.2	1.4	1.0	0.1	0.	0.	0.	0.	0.			66.7

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT MANUVR															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4							1								1
2.2								1		1					2
2.0			1					1		3					6
1.8			1	2	1	2	3	4	2	1	1				17
1.7				2	1	3	1	1	1						10
1.6		2	4	3	2	2	1								14
1.5		2	4	8	3	6	5	6							34
1.4		6	16	15	10	22	11	7	2		1				90
1.3	6	26	30	36	28	26	14	10	5						181
1.2	11	88	68	67	91	76	31	13	4	4					453
0.8															
0.7		2		3	2	2	2	1		1					13
0.6						1		1							2
0.5						1		1							2
0.4															
0.2								1							1
LESS															
SUM	17	126	124	136	138	141	68	43	19	6	6	2			826
TIME	38.8	214.7	188.0	179.5	197.7	173.2	78.2	28.9	13.3	6.0	1.1	0.2	0.	0.	0. 1119.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT DESCNT															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.6					1										1
1.5					1		1								2
1.4															
1.3	1		1	1	2	1	1	1							7
1.2	3	1	2	4	4	7	11	1	2						35
0.8								3	1						4
0.7									1						1
0.6								1							1
0.5									2						2
0.4															
0.2															
SUM	4	1	3	5	6	9	12	6	7						53
TIME	20.8	31.6	22.2	24.1	35.7	31.0	21.5	9.6	3.5	1.4	0.	0.	0.	0.	0. 201.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT STEADY															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4															
1.3			1			1	2								4
1.2			1	2	2	3	6	3	1						27
0.8															
0.7							1								1
0.6															
SUM		2	2	2	3	5	10	3	1						32
TIME	34.2	21.3	34.0	33.7	56.8	70.9	57.8	49.2	15.7	7.1	0.	0.	0.	0.	0. 385.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4							1								1
2.2								1		1					2
2.0			1					1		3					6
1.8			1	2	1	2	3	4	2		1				17
1.7				2	1	3	1	1	1						10
1.6		2	4	3	2	2	1								14
1.5		2	4	8	3	7	5	6							35
1.4		6	16	15	10	23	11	6	2		1				92
1.3	7	26	32	37	30	27	16	12	6	1					194
1.2	14	90	71	74	99	88	52	21	10	5					523
0.8															
0.7		2		4	2	2	4	3		1					20
0.6						1	1	1							3
0.5						1		1							3
0.4								2							2
0.2								1							1
LESS															
SUM	21	128	129	145	147	156	91	59	31	8	6	2			923
TIME	113.8	279.8	251.1	243.6	297.4	246.1	161.7	49.1	33.6	14.6	1.1	0.2	0.	0.	0. 1773.4

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.7																
1.6					1										1	
1.5																
1.4					1										1	
1.3					3										6	
1.2	1	4	4	14	7	2	2								34	
0.9																
0.7					1										1	
0.6																
SUP	1	4	5	16	13	2	2								43	
TIME	16.3	15.5	17.6	34.9	48.7	36.0	14.8	10.9	2.6	3.4	0.0	0.0	0.0	0.0	199.4	

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4				1											3	
2.2						4	3	2	1						8	
2.0						2	2	1	2	1		1			9	
1.8			1	2	7	7	5	3	5	5	3	1	1		40	
1.7		1	1	2	6	4	4	4	4	3	4				33	
1.6		2	4	8	12	9	4	10	7	2	1				59	
1.5	1	3	17	5	17	12	15	13	7	2	2	2			96	
1.4	13	20	29	25	32	22	25	19	3	4	2		2		195	
1.3	23	40	58	64	64	65	50	23	13	4	1	1			406	
1.2	7	43	70	102	141	215	177	135	78	32	8	1			1009	
0.8																
0.7	3	4	10	12	15	14	20	7	6	4					95	
0.6	1	3	1	2	5	7	3	4	1	1					29	
0.5	1	1		1	2	3	2	1							11	
0.4																
0.2																
LESS										1					1	
SUM	12	88	147	227	270	377	328	255	160	79	31	14	5	1	1994	
TIME	24.9	147.6	224.9	359.3	510.0	514.9	392.5	241.0	123.7	52.5	11.9	3.0	1.3	0.0	0.0	2609.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.8																
1.7				1	1										2	
1.6																
1.5				1			2								3	
1.4		1			3	1	2								7	
1.3		2	4	4	9	2	3			1					25	
1.2	1	7	3	6	14	11	10	5	8	6	1	1			73	
0.8																
0.7				2	3	4	4	4	1						18	
0.6																
0.5							1	1	1	1					3	
0.4							1	1							2	
0.2							1	1							2	
LESS																
SUP	1	7	6	12	23	28	15	19	10	7	1	1	1		135	
TIME	24.0	25.0	25.7	29.2	60.7	69.2	64.4	41.6	22.1	9.9	1.3	0.8	0.4	0.1	0.0	372.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.7																
1.6				1											1	
1.5																
1.4					1	1									2	
1.3					1	2									3	
1.2	1	1	1	7	11	5	8	4							42	
0.8																
0.7		1			1	2	1								5	
0.6																
SUP	1	2	1	4	14	14	9	4							53	
TIME	34.2	12.9	27.1	78.8	202.6	327.3	232.4	147.8	78.6	25.5	1.2	0.0	0.0	0.0	0.0	1179.5

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4				1				2							3	
2.2						4	3		1						8	
2.0						2	2	1	2	1					9	
1.8			1	2	7	7	5	3	5	5	3	1	1		40	
1.7			1	1	3	7	4	4	4	3	4			1	35	
1.6			2	4	9	13	9	4	7	2	1				61	
1.5		1	3	17	6	17	12	17	7	2	2	2			99	
1.4		13	21	29	25	37	25	27	19	3	4	2			205	
1.3		23	42	63	77	77	65	53	23	13	5	1	1		440	
1.2	8	52	75	113	176	244	198	150	90	38	8	2	1		1158	
0.8																
0.7	3	4	11	14	18	26	26	12	7	4					119	
0.6	1	3	1	2	5	7	3	4	1	1					29	
0.5	1	1		1	2	3	2	2	1	1					14	
0.4							1	1							2	
0.2							1	1							2	
LESS										1					1	
SUM	13	97	159	245	317	432	363	285	174	86	32	15	6	1	2225	
TIME	101.4	201.0	301.3	502.1	821.5	947.4	704.1	441.2	227.1	88.6	14.4	4.6	1.7	0.1	0.	4356.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6							1			1					2	
1.5						2									2	
1.4					1	1	2	1							5	
1.3				1	2	2	5	5	2	1					19	
1.2		1	1	2	2	5	5	2	1							
0.8																
0.7		1		1		2	4	1							9	
0.6						1									1	
0.5							1								1	
0.4																
0.2																
LESS				1	3	7	12	9	2	1	1				1	
SUM	1	1	3	3	7	12	9	2	1	1					40	
TIME	0.3	0.9	1.7	5.0	10.6	11.3	13.7	12.4	1.5	0.8	0.2	0.1	0.	0.	0.	58.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4							1								1	
1.3								1							3	
1.2					2			1								
0.8					2		1	1							4	
SUM					2		1	1								
TIME	0.	0.	0.	3.2	10.6	19.0	23.8	18.7	3.5	0.7	0.	0.	0.	0.	0.	79.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6							1			1					2	
1.5					2										2	
1.4					1	2	2								6	
1.3				1	1	4	5	3	1						22	
1.2		1	1	2	4	5	5	3	1							
0.8																
0.7		1		1		2	4	1							9	
0.6						1									1	
0.5							1								1	
0.4																
0.2																
LESS			1	3	9	12	10	3	1	1					1	
SUM	1	1	3	3	9	12	10	3	1	1					44	
TIME	0.3	2.4	4.9	9.2	23.3	32.8	39.8	33.3	5.1	1.5	0.2	0.1	0.	0.	0.	154.9

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4					1			1	2							4
2.2							4	3	1	1	1					10
2.0			1				2	2	2	2	4	1	1			15
1.8			1	3	3	9	10	9	5	6	5	4	1			57
1.7			1	3	4	10	9	5	5	5	3	4	1	1		45
1.6		2	6	7	11	15	10	4	11	7	2	1				76
1.5		3	7	25	9	24	17	24	13	7	3	2	2			136
1.4		19	37	44	38	63	34	35	21	3	5					301
1.3	7	51	74	102	103	106	88	68	29	14	5	1	1			649
1.2	24	156	156	199	201	340	257	177	104	44	8	2	1			1749
0.8																
0.7	3	7	11	19	20	24	32	17	10	4	1					148
0.6	1	3	1	2	5	8	4	5	2	1	1					33
0.5	1	1		1	2	4	2	4	2	1						18
0.4							1	1	2							4
0.2							1	1	1							3
LESS				1							1					2
SUM	34	242	295	406	475	603	444	356	210	95	39	17	6	1		3250
TIME	294.8	530.9	584.9	784.9	1168.8	1274.4	917.3	572.8	271.8	105.2	15.7	4.9	1.7	0.1	0.	6528.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE LESS, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3						1										2
1.2				1		1										
0.8																
SUP				1		1										2
TIME	22.4	8.4	0.1	4.0	4.7	1.4	1.2	0.1	0.	0.	0.	0.	0.	0.	0.	48.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE LESS, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.8																
1.7						1	1			1						1
1.6						3	1									2
1.5			1	2	5	3	1	1								13
1.4		3	3	1	5	4	3									19
1.3	1	3	5	8	17	5	4	1		1						38
1.2	2	7	6	5	13	23	10	2								68
0.8																
0.7									1							1
0.6		1														1
0.5																
SUM	3	14	15	16	33	36	15	4	1	2						143
TIME	14.9	42.6	25.5	24.3	35.4	45.7	22.4	3.3	1.4	0.2	0.	0.	0.	0.	0.	220.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE LESS, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5					1											1
1.4																
1.3				1												1
1.2							2	1								3
0.8																
SUP				1	1		2	1								5
TIME	0.1	5.0	0.9	3.4	2.7	2.9	2.5	0.3	0.	0.	0.	0.	0.	0.	0.	26.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE LESS, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3					1	4	1									6
1.2		2														
0.8																
SUP		2			1	4	1									8
TIME	41.3	17.1	4.1	5.8	8.6	13.4	16.7	7.3	2.3	1.6	0.	0.	0.	0.	0.	122.1

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE LESS																
LESS	40	50	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.8									1						1	
1.7															2	
1.6					1	1									13	
1.5			1	2	4	3	1	1							20	
1.4		3	3	1	6	4	2								39	
1.3	1	3	5	9	1	5	4	1	1						81	
1.2	2	9	6	6	14	28	12	3								
C.8																
C.7								1							1	
C.6		1													1	
C.5																
SUM	3	16	15	19	35	41	22	5	2						158	
TIME	19.7	73.1	43.6	37.6	50.2	63.4	47.8	11.0	3.7	1.8	0.	0.	0.	0.	0.	417.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4															1	
1.3							1								5	
1.2					2	3										
C.8															2	
C.7			1		1											
C.6																
SUM			1		3	3	1								8	
TIME	44.8	19.5	23.4	29.5	28.1	29.8	14.8	5.1	3.7	0.	0.	0.	0.	0.	0.	202.2

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4															1	
2.2									1						7	
2.0										1					4	
1.8							1		3	2	1				13	
1.7			1	3	1	1	1	1		1					29	
1.6					1	2									57	
1.5		1	1	5	1	3		1							152	
1.4		1	6	5	5	4	5	2								
1.3	1	2	5	12	19	10	4	1	3							
1.2		10	29	33	33	21	15	5	5	1						
C.8																
C.7	1	3		1	1			1							7	
C.6																
SUM	2	17	42	59	61	39	27	11	12	5	4	1			280	
TIME	5.1	87.6	87.2	83.7	96.0	81.8	49.7	22.1	6.7	4.0	1.5	0.0	0.	0.	0.	525.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.5															1	
1.4				1											9	
1.3															10	
1.2			3	2	1	2		1								
C.8																
SUM			3	3	1	2		1								
TIME	10.0	16.3	12.6	15.3	17.5	12.7	6.9	6.1	1.9	0.2	0.1	0.	0.	0.	0.	101.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6							1								1	
1.5															21	
1.4									1							
1.3																
1.2		1	2	4	7	2	4									
C.8																
SUM		1	2	4	7	2	5		1	1					23	
TIME	55.7	29.4	36.8	67.8	113.4	136.5	55.7	29.6	16.1	2.6	0.7	0.3	0.	0.	0.	515.4

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4									1						1
2.2										1					1
2.0							1		3	2	1				7
1.8			1	3	1	1	1	1		1					9
1.7					1	2	1								4
1.6						1				1					14
1.5		1	1	5	1	4									30
1.4		1	6	6	4	5	1	2							59
1.3	1	2	5	12	19	10	4	2	1	1					187
1.2		11	34	39	43	28	15	6	6	1					9
0.8					2			1							
0.7	1	3	1	1											
0.6											1				
SUM	4	18	48	66	77	46	32	13	13	6	4	1			321
TIME	115.6	152.4	166.0	196.3	255.1	230.8	134.1	62.9	27.7	6.8	2.3	0.3	0.	0.	1345.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5						2	2								4
1.4					2		3								6
1.3			1		4	7	8	2	1						36
1.2	1	2	2	2	7										5
0.8					1	1	1								
0.7		1		1											
0.6															
SUM	1	3	2	4	7	7	10	14	2	1					51
TIME	35.4	17.1	3.1	61.2	109.	116.8	79.2	52.2	14.4	0.9	0.	0.	0.	0.	519.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT MANUVR															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4							1	1							2
2.2					1	1	3	2		1					3
2.0			1		2	1	4	1	1	2		1			8
1.8				1	6	1	4	3	2	2					14
1.7				1	7	5	5	6			2	1			19
1.6	1			5	6	8	7	6	3	2	1		2		31
1.5		1	3	5	14	14	13	17	3	1					53
1.4		3	6	10	14	14	17	29	10	3					97
1.3	1	6	15	20	27	27	53	15	26	4	1				173
1.2		22	19	36	61	61									419
0.8					5	7	7	6	2						48
0.7	2	2	9	4		7	4					1			10
0.6	2	1			1	1	3								3
0.5					1	1									6
0.4	3		1		1	1									1
0.3		1													
0.2															
LESS															
SUM	9	36	54	77	129	149	103	113	144	48	13	7	5		887
TIME	7.1	40.0	67.3	127.0	245.1	243.5	185.9	146.1	110.2	32.1	3.2	1.6	0.5	0.	1214.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT DESCNT															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.8											1				2
1.5			1												7
1.4					4	1	1	1							16
1.3		1	1	1	5		1		2						7
1.2								1							1
0.8					4	1									
0.7					1										
0.6															
0.5															
0.4															
0.3															
0.2															
LESS															
SUM		2	2	1	4	14	2	2	2		1				33
TIME	7.4	4.7	1.4	16.6	34.7	39.4	41.7	26.2	16.3	11.5	3.5	1.0	0.	0.	220.3

TABLE XXVI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																
1.3				1		1	1								3	
1.2		1	2	7	9	7	6	10	2						44	
G.8																
G.7					1		3	1							5	
G.6																
SUM		1	2	9	10	8	10	11	2						52	
TIME	42.2	4.8	29.7	76.5	215.7	312.3	261.1	179.9	116.6	57.6	8.7	0.	0.	0.	0.	1308.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4							1	1							2	
2.2									1		1	1			3	
2.0				1	1		3	2		1					8	
1.8		1			2	1	4		1	2	2	1			14	
1.7			1	4	1	4	3	2							19	
1.6	1		1	7	5	4	5	6			2				31	
1.5		1	4	5	6	5	7	6	3	2	2	2			55	
1.4		3	6	10	14	14	18	15	17	3	1				101	
1.3	1	6	15	21	24	33	20	30	10	3					189	
1.2	1	27	23	41	70	99	55	68	31	4	1				515	
G.8																
G.7	2	3	9	5	4	13	5	8	8	2					65	
G.6	2	1			3	1	3					1			11	
G.5				1	1	1									3	
G.4	3		1			1									6	
G.2		1		1		1									1	
LESS																
SUM	10	42	59	84	144	180	122	139	159	53	13	8	5		1023	
TIME	93.1	75.7	137.4	281.3	603.6	712.1	571.5	404.3	258.0	102.2	20.4	2.6	0.5	0.	0.	3263.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.5							1	1							2	
1.4																
1.3							1								1	
1.2																
G.8																
G.7		1	1												2	
G.6		1													1	
G.5																
SUM		2	1			2	1								6	
TIME	0.	0.4	0.6	0.7	1.4	3.4	3.0	2.5	3.1	2.4	0.	0.	0.	0.	0.	17.7

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3									1						1	
1.2																
G.8																
G.7															1	
G.6			1													
G.5																
SUM			1						1						2	
TIME	0.	0.	0.9	1.7	3.9	4.3	2.2	3.5	1.1	3.1	0.2	0.1	0.6	0.	0.	18.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.5							1	1							2	
1.4																
1.3							1		1						2	
1.2																
G.8																
G.7		1	1												2	
G.6		1	1												2	
G.5																
SUM		2	2			2	1		1						8	
TIME	0.9	1.4	3.2	6.4	14.0	15.6	17.1	13.7	9.3	3.0	0.2	0.1	0.6	0.	0.	84.0

TABLE XXVI - Continued

MANEUVER N2 PEAKS FOR VELOCITY VS N2 BY WEIGHT 9000																SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
2.4								1	1							2
2.2																4
2.0																9
1.8																21
1.7																29
1.6																37
1.5																82
1.4																153
1.3																287
1.2																785
0.8																77
0.7																14
0.6																3
0.5																6
0.4																1
0.2																1510
LESS																
SUM	15	78	124	168	255	267	175	158	173	62	17	9	5			
TIME	299.3	303.4	344.2	521.6	923.7	1021.9	763.9	492.0	298.7	113.8	22.9	3.0	1.1	0.	0.	5109.6

MANEUVER N2 PEAKS FOR VELOCITY VS N2																SUM
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180		
2.4							3	4							8	
2.2							7	6	3	1	2	1			17	
2.0			1	1	3	12	13	5	12	11	9	2	1		30	
1.8			2	3	5	9	12	9	8	5	4				88	
1.7			2	7	11	12	10	20	8	3	3				79	
1.6	1	2	6	8	19	24	16	22	11	5	4	4			120	
1.5		5	13	39	23	37	31	33	10	6	3	1		1	227	
1.4		27	53	63	67	85	54	44	31	11	3	2			480	
1.3	11	63	100	145	167	163	117	84	79	15	6	1			976	
1.2	20	206	222	291	424	519	359	262	202						2614	
0.8							31	20	6	1					243	
0.7	9	14	24	27	29	40	42	3	1	1		1			55	
0.6	3	8	2	5	5	13	5	4	2						21	
0.5	1	1		1	1	5	2	1	2						12	
0.4	4	1	1				1	1							4	
0.2		1													2	
LESS				1						1						
SUM	57	328	426	591	754	911	671	564	405	172	66	36	13	1	4976	
TIME	644.9	849.8	943.6	1344.3	2159.5	2382.2	1771.4	1105.3	599.6	233.7	48.0	12.5	4.0	0.4	0.512105.7	

TABLE XXVII. n_x PEAKS FOR AIRSPEED VERSUS n_x
BY WEIGHT, SAMPLE I

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 6000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.20																
-0.15																
-0.10																
0.10									1							1
0.15	1															1
0.20																1
SUM	1								1		1					3
MINS	9.5	1.6	1.2	1.9	0.9	1.4	3.1	1.7	1.8	1.1	2.0	0.4	0.	0.	0.	25.7

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25							1	1								2
-0.20									1	2	3	2			1	2
-0.15							2	2		2						11
-0.10																
0.10	3	1			1											5
0.15																
SUM	3	1			1		3	3	1	2	3	2			1	20
MINS	42.3	13.9	19.4	36.0	66.0	84.5	87.1	38.8	27.3	13.6	7.4	4.2	1.2	0.2	0.3	442.3

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 8000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25									1		2	3				6
-0.20								3	1	2	2	3				13
-0.15						2	2	4	5	12	13	7	2			47
-0.10																
0.10	11	1	3	2	1											18
0.15																
SUM	11	1	3	2	1	2	2	7	7	14	17	13	4			84
MINS	294.8	530.9	586.9	784.9	1168.8	1274.4	917.3	572.8	271.8	105.2	15.7	4.9	1.7	0.1	0.	6528.2

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.35																
-0.30										1						1
-0.25						1					1	1	1			4
-0.20									2	1	1					4
-0.15		1						5	1	2	3	6	2			20
-0.10																
0.10	8	8		3	3											22
0.15	1															1
0.20																
SUM	9	9		3	3	1		5	3	4	5	7	3			52
MINS	219.3	303.4	344.2	521.6	923.7	1021.9	763.9	442.0	298.7	113.8	22.9	3.0	1.1	0.	0.	5109.5

TABLE XXVIII. n_x PEAKS FOR AIRSPEED VERSUS n_x
BY ALTITUDE, SAMPLE I

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE LESS																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.20																
-0.15									1	1						2
-0.10																
0.10	7	3														10
0.15																
SUM	7	3							1	1						12
MINS	174.7	121.0	69.3	67.5	75.2	71.5	52.5	29.4	9.9	2.3	0.	0.	0.	0.	0.	663.6

TABLE XXVIII - Continued

	NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE 1000										
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
-0.15																	
-0.10						1			1		2	2				6	
-0.05										1	1					2	
-0.15						1		1		2	2	1				7	
-0.10																	
-0.05	5	2	1	1												9	
0.10	1															1	
0.15																	
0.20																	
SUM	6	2	1	1		2		1	1	3	5	3				25	
WINS	242.6	437.7	414.4	446.6	561.4	527.4	310.8	158.1	67.3	21.6	3.3	0.5	0.	0.	0.	3193.9	

	NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE		2000										
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM			
-0.15																			
-0.10										1						1			
-0.05							1	1			1	2	1			6			
-0.20								3	4	2	2	3	2			16			
-0.15		1				1	4	10	5	13	18	12	4			68			
-0.10																			
0.10	4	5	2	4	5				1							25			
0.15	1															1			
0.20																			
SUM	9	6	2	4	5	1	5	14	10	16	21	17	7			117			
WINS	127.2	285.2	453.5	812.9	1474.6	1732.3	1345.1	870.2	502.8	203.8	44.0	11.5	2.9	0.1	0.	7976.1			

	NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE		5000										
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM			
-0.25																			
-0.20															1	1			
-0.15												2				2			
-0.10																			
0.10	2															2			
0.15																			
SUM	2											2			1	5			
WINS	1.2	4.7	10.9	16.6	39.4	51.0	62.7	56.1	19.4	5.9	0.7	0.5	1.1	0.2	0.5	270.8			

	NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE		SUM										
	LESS	50	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM			
-0.15																			
-0.10																			
-0.05							1	1	1	1	3	4	1			12			
-0.00								3	4	3	3	1	2		1	19			
-0.05		1				2	4	11	6	16	20	15	4			79			
-0.10																			
-0.15	22	10	3	5	5				1							46			
-0.20	2															2			
-0.25																			
-0.30																			
SUM	24	11	3	5	5	3	5	15	12	20	26	22	7		1	159			
WINS	446.9	849.1	442.6	1344.3	2159.5	2382.2	1771.4	1105.2	599.6	233.7	48.0	12.5	4.0	0.4	0.5	12105.6			

TABLE XXIX. n_x PEAKS FOR CYCLIC DEFLECTION VERSUS n_x BY MISSION SEGMENT, SAMPLE 1

NX PEAKS FOR CYCLIC DEFLECTN VS NX BY MISS. SEG. ASCENT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.10										
0.10			1	3						4
0.15										
SUM			1	3						4

TABLE XXIX - Continued

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. MANOVR										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.35										
-0.30			1							1
-0.25	3	1	5	2	1					12
-0.20	1	3	8	7						19
-0.15	4	17	27	21	7					75
-0.10										
0.10	1	1	6	24	9					41
0.15		1								1
0.20										
SUM	9	23	47	54	17					150

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15	1	1	1							3
-0.10										
0.10					1					1
0.15										
SUM	1	1	1		1					4

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
0.10										
0.15				1						1
0.20										
SUM				1						1

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.35										
-0.30			1							1
-0.25	3	1	5	2	1					12
-0.20	1	3	8	7						19
-0.15	5	18	28	21	7					79
-0.10										
0.10	1	1	7	27	10					45
0.15		1		1						2
0.20										
SUM	10	24	49	58	18					159

TABLE XXX. n_y PEAKS FOR AIRSPEED VERSUS n_y
BY WEIGHT, SAMPLE I

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 6000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.25																
-0.20																
-0.15								1	1	1	1	1				4
-0.10																
0.10			1						1	2						4
0.15																
SUM			1					1	2	3	1	1				9
WINS	8.5	1.6	1.2	1.9	0.9	1.4	3.1	1.7	1.8	1.1	2.0	0.4	0.	0.	0.	25.7

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.25																
-0.20								1	1						1	3
-0.15	1			1			4	3	4	4	2	3				22
-0.10																
0.10				3	3	3	1	3	7	2		6				28
0.15					1			1								2
0.20																
0.25									1							1
0.30																
0.35																
SUM	1			4	4	3	5	8	13	6	2	9			1	56
WINS	42.3	13.9	19.4	36.0	66.0	84.5	87.1	38.8	27.3	13.6	7.4	4.2	1.2	0.2	0.5	442.3

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 8000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25				1	1											2
-0.20	2	7	3	4	6	2	3	1	3	2		1	1			35
-0.15	21	12	20	29	38	46	33	36	31	8	5	3		1		263
-0.10																
0.10	1	7	15	23	29	58	38	49	31	21	8	10	1			291
0.15		1		2	5	4	3	5	3	5	1	1				30
0.20			1	1	1	1		1		1						6
0.25									1							1
0.30				1												1
0.35										1						1
0.40																
SUM	24	27	39	61	80	111	77	92	69	38	14	15	2	1		650
WINS	294.8	530.9	584.9	784.9	1168.8	1274.4	917.3	572.8	271.8	105.2	15.7	4.9	1.7	0.1	0.	5528.2

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.40						1										1
-0.35					2											2
-0.30																1
-0.25	1						3	1	1							6
-0.20	1	1	2	5	2	4	4	5	4	4	2	1	2			39
-0.15	15	16	11	18	23	24	33	54	52	28	7	3				284
-0.10																
0.10	6	11	8	11	20	24	25	29	40	22	2	1	1			198
0.15		1			2	3	3	3	1	2	2					17
0.20			1		2				1	1						5
0.25																
SUM	27	31	22	34	51	56	68	92	99	57	13	5	3			553
WINS	299.7	303.4	344.2	521.6	923.7	1021.9	763.9	492.0	298.7	113.8	22.9	3.0	1.1	0.	0.	5109.5

TABLE XXXI. n_y PEAKS FOR AIRSPEED VERSUS n_y
BY ALTITUDE, SAMPLE I

	NY	PEAKS	FIR	AIR	SPEED	VS	NY	NY	ALTITUDE	LESS								
	LFSS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM		
-0.25																		
-0.20		1		1												2		
-0.15	5	4	2	3	5	3	4		2							28		
-0.10																		
0.10	1	5	1	2	3	1	1									14		
0.15						1										1		
0.20																		
SUM	6	10	3	6	8	5	5		2							45		
MIN	174.7	121.7	69.3	67.5	75.2	71.5	52.5	20.4	9.9	2.3	0.	0.	0.	0.	0.	663.6		

	NY PEAKS FOR		AIRSPEED		VS	NY	BY	ALTITUDE		1000									
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM			
-0.35																			
-0.30	1															1			
-0.25	1			1			1									3			
-0.20	3	6	3	5	6	2	1	2	2	1	1					32			
-0.15	19	17	17	19	23	19	7	4	4	6	2					137			
-0.10																			
0.10	2	6	11	15	14	33	17	10	7	5						128			
0.5				1	3	2		1		2	1					10			
0.10					1											1			
0.20																			
0.25	26	29	31	41	47	56	26	25	13	14	4					312			
SUM	242.6	437.7	414.4	446.6	563.4	527.4	310.8	158.1	67.3	21.6	3.3	0.5	0.	0.	0.	3193.9			

	NY PEAKS FOR		AIR SPEED	VS	NY	BY	ALTITUDE		2000								
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
LFSS																	
-0.40						1										1	
-0.35					2											2	
-0.30																	
-0.25					1	2	1	1								5	
-0.20		3	2	3	2	4	6	5	6	7	1	2	3			43	
-0.15	13	7	12	26	33	48	57	87	80	34	13	10		1		421	
-0.10																	
0.10	2	4	12	20	15	51	46	61	72	42	10	16	2			375	
0.15		2		1	5	4	6	8	4	5		1				28	
0.20			2	1	2	1		1	1	2						10	
0.25									1							1	
0.30				1					1							2	
0.35										1						1	
0.40																	
SUM	15	19	24	52	80	109	117	163	166	90	26	29	5	1		899	
TIME	227.2	285.2	453.5	812.9	1473.6	1732.3	1345.1	870.2	502.8	203.8	44.0	11.5	2.9	0.1	0.	7970.1	

	AV PEAKS FOR		AIR SPEED	VS	NY	BY	ALTITUDE		5030							
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.25																
-0.20															1	1
-0.15								2	3	2						7
-0.10																
0.10		1										1				4
0.15																
SUM		1					2	5	2			1			1	12
WTAS	1.2	4.7	10.9	16.6	39.4	51.0	62.7	56.1	19.4	5.9	0.7	0.5	1.1	0.2	0.5	270.8

	NY PEAKS FOR		AIRSPD	VS	NY	BY	ALTITUDE		SUM								
	LESS	40	50	70	80	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																	
-0.40							1										1
-0.35					2												2
-0.30	1																1
-0.25	1			1	1			3	1	1							6
-0.20	3	10	5	5	8		6	7	7	8	7	2	2	3		1	70
-0.15	37	24	31	48	61		70	70	94	88	40	15	10		1		593
-0.10																	
-0.10	5	18	24	37	52		65	64	81	79	47	10	17	2			521
-0.15		2		2	8		7	6	9	4	7	3	1				49
0.00			2	1	3		1		1	1	2						11
0.25										1							1
0.30				1						1							1
0.35																	1
0.40											1						
SUM	47	59	62	95	135		170	150	193	183	104	30	30	5	1	1	1268
MIN	644.9	843.8	949.6	1344.3	2159.5	2182.2	1771.4	1105.2	599.6	233.7	48.0	12.5	4.0	0.4		0.512105	

TABLE XXXII. n_y PEAKS FOR CYCLIC DEFLECTION VERSUS
 n_y BY MISSION SEGMENT, SAMPLE 1

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. ASCENT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										1
-0.25				1						2
-0.20					2					37
-0.15		8	14	6	9					
-0.10										50
0.10		7	21	18	2					3
0.15			1	1	1					1
0.20			1							
0.25										94
SUM		17	37	26	14					

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. MANUVR										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
LESS										1
-0.40					1					2
-0.35					2					1
-0.30			1							7
-0.25			1	3	3					68
-0.20	2	7	18	24	17					450
-0.15	8	47	160	149	86					
-0.10										358
0.10	15	64	158	57	23	1				40
0.15	2	6	10	13	9					8
0.20			3	5						1
0.25				1						1
0.30					1					1
0.35				1						
0.40										938
SUM	27	124	351	293	142	1				

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										5
-0.20	1		2	1	1					53
-0.15	3	4	20	14	8					
-0.10										69
0.10	1	6	25	23	14					3
0.15			1	1	1					2
0.20			1							
0.25										1
0.30				1						
0.35										133
SUM	5	14	49	40	25					

TABLE XXXII - Continued

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. STEADY

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.25										
-0.20					3					3
-0.15					52	1				53
-0.10										
0.10					44					44
0.15					3					3
0.20										
SUM					102	1				103

NY PEAKS FOR CYCLIC DEFLECTN VS NY BY MISS. SEG. SUM

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
LESS										
-0.40					1					1
-0.35					2					2
-0.30			1							1
-0.25			1	4	3					8
-0.20	3	7	20	25	23					78
-0.15	11	63	154	165	155	1				593
-0.10										
0.10	16	79	204	138	83	1				521
0.15	2	6	12	15	14					49
0.20			5	5	1					11
0.25				1						1
0.30				1	1					2
0.35				1						1
0.40										
SUM	32	155	437	359	283	2				1268

TABLE XXXIII. n_x PEAKS FOR n_x VERSUS n_z , SAMPLE I

n_x PEAKS FOR n_x VS n_z

	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4						2	2									4
2.2				1	1	1	3									6
2.0					6	3	4									13
1.8					1	9	9		2							21
1.7					2	1	10									13
1.6							8									8
1.5					1	1	12		2							16
1.4						1	7		4							12
1.3							6		2							8
1.2							7		7							14
1.1					1	1	11		29	2						44
1.0																
SUM			1	12	19	79			46	2						159

TABLE XXXIV. n_x PEAKS FOR n_y VERSUS n_x , SAMPLE I

NX PEAKS FOR NY VS NX															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
-0.35							1								1
-0.30					1		10	1			1				12
-0.25						2	16								19
-0.20				1		7	65	6							79
-0.15															46
-0.10						1	43	1		1					2
0.10							2								
0.15															159
0.20				1	1	10	117	8		1	1				
SUM															

TABLE XXXV. n_y PEAKS FOR n_x VERSUS n_y , SAMPLE I

NY PEAKS FOR NX VS NY															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
LESS							1								1
-0.40							2								2
-0.35							1								1
-0.30							7								8
-0.25						3	72								75
-0.20					3	3	94								99
-0.15				1	2	16	564	6	4						593
-0.10															521
0.10				1	2	12	904	2							49
0.15						2	47								11
0.20							11								1
0.25							1								2
0.30							2								1
0.35							1								
0.40															1268
SUM				2	7	34	1213	8	4						

TABLE XXXVI. n_y PEAKS FOR n_y VERSUS n_z , SAMPLE I

NY PEAKS FOR NY VS NZ															SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	
2.4								3							4
2.2								2							10
2.0						3	5	2							14
1.8					1	5	2	2	2	1				1	12
1.7						3	5	2	2						11
1.6						2	5	4							21
1.5					2	2	10	6	1						23
1.4					1	4	33	13	2						71
1.3					1	10	38	17	4						116
1.2			1			3	69	38	4	1	1				149
1.1							423	431	34	9		1			5
1.0		1	1	1	3	45	3	1							1
0.9						1		1							1
0.8								1							1
0.7															
0.6															
0.5															
0.4															
SUM	1	2	1	8	78	593	521	49	11	1	2	1			1268

TABLE XXXVII. n_z PEAKS FOR n_x VERSUS n_z , SAMPLE I

N7 MANEUVER PEAKS FOR NX VS NZ																
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM	
2.4					1	4	3								8	
2.2					2	6	6								17	
2.0			1		3	5	18								30	
1.8					4	17	67								88	
1.7						6	73								79	
1.6						5	115								120	
1.5						5	222								227	
1.4						2	477	1							480	
1.3						4	968	4							976	
1.2						5	2607	1	1						2614	
0.8							241	2							243	
0.7						1	54								55	
0.6							21								21	
0.5							12								12	
0.4							4								4	
0.2						1	1								2	
LESS																
SUM			1	5	11	61	4884	8	1						4976	

TABLE XXXVIII. n_z PEAKS FOR n_y VERSUS n_z , SAMPLE I

N2 MANUEVER PEAKS FOR NY VS NZ																SUM
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40		
2.4						1	2	6			1				8	
2.2							14								17	
2.0				1		1	3	24				1			30	
1.8						3	11	70	1	3					88	
1.7							2	76							79	
1.6						2	6	111							120	
1.5						1	4	220	1	1					227	
1.4			1			1	9	466							480	
1.3						1	12	957		3					976	
1.2						1	17	2584		11	1				2614	
0.9																
0.7							2	238	2	1					243	
0.6								53	2						55	
0.5								21							21	
0.4								12							12	
0.2								3	1						4	
LESS							1	1								
SUM			1		1	11	68	4856	28	9		1	1		4976	

TABLE XXXIX. TIME FOR ALTITUDE VERSUS AIRSPEED BY
WEIGHT AND MISSION SEGMENT, SAMPLE II

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		0.2	2.2				2.4
40		0.2	1.8				2.0
60		1.0	1.1				2.2
70			0.6				0.6
80			1.3				1.3
90			1.5				1.5
100			0.2				0.2
110			0.2				0.2
120			0.1				0.1
130							
140							
150							
160							
170							
180							
SUM		1.4	9.1				10.5

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS			2.2				2.2
40		0.1	5.7	0.2			6.0
60			8.5				8.5
70			21.4	0.5			21.9
80			40.3	1.7			41.9
90		0.6	40.7	1.5			42.9
100		0.2	28.5	2.5			31.1
110		0.2	14.3	4.0			18.4
120			15.2	2.5			17.8
130			10.7	4.4			15.1
140		0.1	1.5	0.7			2.2
150			0.7				0.7
160		0.1					0.1
170			0.1				0.1
180							
SUM		1.2	189.6	18.0			208.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS		1.5	5.3				6.8
40		1.9	5.4	0.5			7.8
60		0.7	3.2	0.2			4.1
70		1.4	4.1	1.1			6.6
80		1.6	4.2	1.2			7.0
90		0.4	10.4	0.5			11.3
100		0.5	5.8	0.3			6.6
110		0.4	5.2				5.6
120		0.7	6.5				7.3
130			2.4				2.4
140			1.4				1.4
150							
160							
170							
180							
SUM		9.1	54.0	3.7			66.8

TABLE XXXIX - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS		3.8	16.0	1.0			20.8
40							
60							
70			5.7				5.7
80			13.8				13.8
90			19.7				19.7
100			45.6				45.6
110			29.8				29.8
120		0.9	38.8				39.8
130		0.5	19.8				20.2
140		0.5					0.5
150							
160							
170							
180							
SUM		5.7	189.3	1.0			196.0

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 7000 , BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS		5.5	25.7	1.0			32.2
40		2.2	15.0	0.7			15.8
60		1.7	12.9	0.2			14.8
70		1.4	31.9	1.6			34.8
80		1.6	59.6	2.9			64.1
90		1.0	72.4	2.0			75.4
100		0.6	80.1	2.8			83.6
110		0.6	49.5	4.0			54.1
120		1.6	60.7	2.5			64.9
130		0.5	32.8	4.4			37.7
140		0.6	2.9	0.7			4.1
150			0.7				0.7
160		0.1					0.1
170			0.1				0.1
180							
SUM		17.4	442.0	22.7			482.2

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. ASCENT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.2	25.2	34.0				60.4
40	0.7	9.9	22.5	1.0			34.1
60	0.6	8.6	20.8	2.1			32.1
70		9.5	38.5	1.2			49.2
80		10.2	55.3	4.8			70.3
90	0.6	7.2	48.9	4.3			60.9
100		8.0	46.4	1.2			55.6
110		3.6	22.7	0.3			26.6
120		0.4	10.3	0.4			11.1
130			1.2				1.2
140							
150							
160							
170							
180							
SUM	3.1	82.4	300.5	15.4			401.4

TABLE XXXIX - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. MANUVR

	LESS	1000	2000	5000	10000	15000	SUM
LESS		45.1	42.6	2.3			90.0
40	0.1	92.7	110.5	6.3			209.5
60	0.0	68.0	179.3	2.3			247.7
70	0.1	84.0	344.0	4.5			432.6
80	1.0	115.2	567.3	11.8			695.3
90	0.1	144.8	705.0	5.9			855.8
100	0.5	73.5	583.4	10.6			668.1
110	0.3	28.0	385.0	8.3			421.5
120		11.8	183.3	1.5			196.7
130		4.1	55.1	0.3			59.5
140		0.7	15.3	0.2			16.1
150		0.1	5.3	0.3			5.7
160			1.5	0.2			1.7
170			0.7	0.2			0.9
180			0.6				0.6
SUM	2.2	666.0	3178.8	54.7			3901.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.1	39.9	40.1				83.1
40	1.9	41.6	43.0				86.5
60	1.6	23.9	38.3				63.8
70	0.7	25.7	47.5	0.3			74.2
80	0.2	22.3	76.2	1.2			99.9
90		14.6	89.1	3.4			107.1
100	0.5	8.6	69.8	2.8			81.8
110	0.3	7.0	61.7	4.7			73.6
120	0.4	1.9	47.1	2.7			52.1
130		0.4	26.7	3.7			30.7
140		0.4	4.0	0.9			5.3
150			1.9				1.9
160			0.7				0.7
170							
180							
SUM	8.7	186.3	546.0	19.8			760.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	11.3	149.3	126.0	2.7			289.4
40		0.8	46.9	0.7			48.5
60		6.6	65.7	4.5			76.9
70		13.9	179.5	12.7			206.1
80		51.4	345.1	22.8			419.2
90		79.9	525.4	27.8			633.0
100		35.5	562.4	16.5			614.3
110	1.7	22.5	436.3	3.9			464.4
120	7.9	25.1	190.7	6.1			229.8
130	1.5	17.9	44.4	4.1			67.9
140	0.2	0.7	3.2				4.2
150							
160							
170							
180							
SUM	22.7	403.7	2525.6	101.8			3053.7

TABLE XXXIX - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 8000 , BY MISSION SEG.							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	15.6	259.6	242.7	5.0			522.8
40	2.7	145.0	222.9	8.0			378.7
60	2.2	105.2	304.1	9.0			420.5
70	0.8	133.1	609.4	18.8			762.0
80	1.2	199.0	1043.9	40.7			1284.8
90	0.8	246.4	1368.3	41.4			1656.9
100	1.0	125.6	1262.0	31.2			1419.8
110	2.3	61.1	905.6	17.1			986.1
120	8.3	39.3	431.4	10.8			489.7
130	1.5	22.4	127.4	8.1			159.4
140	0.2	1.8	22.5	1.1			25.6
150		0.1	7.2	0.3			7.5
160			2.3	0.2			2.5
170			0.7	0.2			0.9
180			0.6				0.6
SUM	36.6	1338.4	6550.9	191.7			8117.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. ASCENT							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS	1.7	47.5	32.9	0.5			82.6
40	0.6	17.2	18.9	2.0			38.7
60	0.2	15.3	18.2	2.0			35.6
70	0.3	18.6	37.2	3.0			59.2
80	0.3	16.4	55.1	1.8			73.5
90	0.1	18.5	80.4	1.6			100.6
100	0.3	12.1	80.1	1.3			93.9
110	0.3	8.2	37.8				46.3
120	0.1	1.1	11.5				12.7
130		0.3	0.3				0.6
140							
150							
160							
170							
180							
SUM	3.9	155.3	372.4	12.1			543.7

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. MANUVR							SUM
	LESS	1000	2000	5000	10000	15000	SUM
LESS		2.7	15.1	1.9			19.7
40		11.4	74.7	7.7			93.8
60		11.6	81.0	5.9			98.5
70		27.7	113.6	4.3			145.7
80	0.5	53.2	172.4	4.1			230.3
90	0.4	59.3	224.1	10.4			294.3
100	2.7	28.0	187.9	10.0			228.5
110	2.0	19.7	138.5	8.5			168.7
120	0.1	7.6	64.1	6.4			78.2
130		0.7	21.1	2.1			24.0
140		0.2	8.1	0.2			8.5
150		0.1	1.9	0.4			2.3
160		0.2	1.3				1.5
170							
180							
SUM	5.8	222.3	1103.9	61.8			1393.7

TABLE NXXIX - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. DESCNT

	LESS	1000	2000	5000	10000	15000	SUM
LESS	0.2	5.1	4.6				10.0
40	0.2	10.1	7.1				17.4
60		6.1	10.2				16.3
70		5.1	10.5				15.6
80		4.9	18.1				23.0
90		3.1	18.0				21.0
100		2.3	17.6				19.9
110		3.8	14.7				18.5
120		0.6	10.3				10.9
130		0.7	2.3				3.1
140			1.4				1.4
150			0.2				0.2
160							
170							
180							
SUM	0.4	41.8	115.1				157.3

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. STEADY

	LESS	1000	2000	5000	10000	15000	SUM
LESS	3.3	94.9	65.0				163.2
40			38.6				38.6
60		3.5	67.2				70.7
70		11.5	87.6				99.0
80		20.3	199.7	1.1			221.1
90		33.4	319.9	10.6			363.9
100		30.1	245.7	19.3			295.1
110		57.2	154.0	3.7			214.9
120	0.6	41.8	140.3				182.8
130	3.8	16.4	24.0				44.2
140			0.3				0.3
150							
160							
170							
180							
SUM	7.8	309.0	1342.4	34.7			1693.8

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT 9000 , BY MISSION SEG. SUM

	LESS	1000	2000	5000	10000	15000	SUM
LESS	5.2	150.1	117.7	2.4			275.4
40	0.8	38.7	139.3	9.7			188.5
60	0.2	36.5	176.6	7.8			221.1
70	0.3	62.9	249.0	7.3			319.4
80	0.9	94.8	445.3	6.9			547.9
90	0.6	114.2	642.4	22.5			779.7
100	3.0	72.5	531.3	30.6			637.4
110	2.3	89.0	344.9	12.3			448.4
120	0.8	51.1	226.3	6.4			284.7
130	3.8	18.1	47.8	2.1			71.8
140		0.2	9.8	0.2			10.2
150		0.1	2.0	0.4			2.4
160		0.2	1.3				1.5
170							
180							
SUM	17.8	728.3	2933.8	108.6			3788.5

TABLE XXXIX - Continued

MINUTES FOR ALTITUDE VS AIRSPEED BY WEIGHT							SUM, BY MISSION SEG.	SUM
	LESS	1000	2000	5000	10000	15000	SUM	
LESS	20.8	415.2	396.0	8.4			830.4	
40	3.5	185.9	375.2	18.4			583.0	
60	2.4	143.4	493.6	17.0			656.4	
70	1.1	197.4	890.3	27.6			1116.3	
80	2.1	295.5	1548.8	50.5			1896.8	
90	1.3	361.7	2083.1	65.9			2512.0	
100	4.0	198.7	1873.4	64.6			2140.7	
110	4.6	150.6	1300.0	33.4			1488.6	
120	9.1	92.1	718.4	19.7			839.3	
130	5.3	40.9	208.1	14.7			268.9	
140	0.2	2.5	35.2	2.0			39.9	
150		0.1	9.9	0.7			10.7	
160		0.2	3.6	0.2			4.0	
170			0.7	0.2			0.9	
180			0.6				0.6	
SUM	54.4	2084.1	9926.7	323.1			12388.4	

TABLE XL. TIME FOR CYCLIC STEADY VERSUS COLLECTIVE STEADY BY MISSION SEGMENT, SAMPLE II

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. ASCENT											
	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											
30						351.4					351.4
40						386.9	217.3				604.2
50											
60											
70											
80											
90											
LESS						738.3	217.3				955.6

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. MANUVR											
	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											
30						1714.3					1714.3
40						2113.6	1676.2				3789.8
50											
60											
70											
80											
90											
LESS						3828.0	1676.2				5504.1

TABLE XL - Continued

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. DESCNT											
	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											
10											
20											396.9
30						396.9					588.1
40						340.9	247.2				
50											
60											
70											
80											
90											985.0
LESS						737.8	247.2				

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. STEADY											
	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											2.0
10		0.2	1.8								46.3
20		7.0	6.9	14.6	13.3	4.5					766.8
30		1.6	42.2	262.6	258.5	177.8	24.1				2446.9
40		15.5	308.8	831.2	967.0	224.3	77.1	23.0			1612.0
50		19.6	330.1	629.7	476.2	62.4	79.1	14.8			69.4
60		1.2	14.4	31.9	12.9	2.9	5.8	0.3			
70											
80											
90											4943.5
LESS		45.2	704.2	1770.1	1727.8	472.0	186.2	38.1			

MINUTES FOR CYCLIC VS COLL. BY MISS. SEG. SUM											
	LESS	10	20	30	40	50	60	70	80	90	LESS
LESS											2.0
10		0.2	1.8								46.3
20		7.0	6.9	14.6	13.3	4.5					766.8
30		1.6	42.2	262.6	258.5	177.8	24.1				4909.6
40		15.5	308.8	831.2	967.0	2686.9	77.1	23.0			6594.1
50		19.6	330.1	629.7	476.2	2903.9	2219.8	14.8			69.4
60		1.2	14.4	31.9	12.9	2.9	5.8	0.3			
70											
80											
90											12388.2
LESS		45.2	704.2	1770.1	1727.8	5776.0	2326.9	38.1			

TABLE XLI. TIME FOR C_T/σ VERSUS μ BY RATE OF CLIMB
AND MISSION SEGMENT, SAMPLE II

MINUTES FOR C_T/S VS μ		BY RATE OF CLIMB				LESS, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.3					0.3
0.05	2.4	0.2				2.6
0.10	12.8					12.8
0.15	31.8					31.8
0.20	26.2	0.1				26.4
0.25	5.0					5.0
0.30	0.2					0.2
0.35						
SUM	78.7	0.3				79.0

MINUTES FOR C_T/S VS μ		BY RATE OF CLIMB				LESS, BY MISSION SEG. DESCNT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0						
0.05	0.1					0.1
0.10	0.4					0.4
0.15	0.7					0.7
0.20	1.6					1.6
0.25	0.4					0.4
0.30						
0.35						
SUM	3.3					3.3

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			LESS, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	SUM		
0.0	0.3				0.3		
0.05	2.5	0.2			2.7		
0.10	13.2				13.2		
0.15	32.5				32.5		
0.20	27.9	0.1			28.0		
0.25	5.4				5.4		
0.30	0.2				0.2		
0.35							
SUM	82.0	0.3			82.3		

MINUTES FOR C_T/S VS μ		BY RATE OF CLIMB				-2100, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.0					0.0
0.05	1.2					1.2
0.10	3.8					3.8
0.15	9.8	0.4				10.2
0.20	4.7					4.7
0.25	0.3					0.3
0.30	0.3					0.3
0.35						
SUM	20.2	0.4				20.6

TABLE XII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -2100, BY MISSION SEG. DESCNT			
LESS	0.06	0.09	0.12	0.15	SUM
0.0					0.2
0.05	0.2				
0.10					0.5
0.15	0.2	0.3			0.8
0.20	0.8				0.3
0.25	0.3				
0.30					
0.35					
SUM	1.6	0.3			1.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -2100, BY MISSION SEG.				SUM
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.0				0.0	
0.05	1.4				1.4	
0.10	3.8				3.8	
0.15	10.0	0.7			10.7	
0.20	5.5				5.5	
0.25	0.6				0.6	
0.30	0.3				0.3	
0.35						
SUM	21.7	0.7			22.5	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1800, BY MISSION SEG. ASCENT			
LESS	0.06	0.09	0.12	0.15	SUM
0.0	0.1				0.1
0.05					
0.10					
0.15					
0.20					
0.25					
0.30					
0.35					
SUM	0.1				0.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1800, BY MISSION SEG. MANUVR			
LESS	0.06	0.09	0.12	0.15	SUM
0.0	0.2				0.2
0.05	0.2				0.2
0.10	3.6				3.6
0.15	15.8				15.8
0.20	31.6	0.1			31.7
0.25	14.4	0.1			14.5
0.30	1.8				1.8
0.35	0.2				0.2
SUM	67.9	0.2			68.1

TABLE XII - Continued

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. DESCNT						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.2				0.2
0.0		0.5				0.5
0.05		0.8				0.8
0.10		2.1				2.1
0.15		1.7	0.2			1.9
0.20		1.0				1.0
0.25		0.4				0.4
0.30						
0.35						
SUM		6.9	0.2			7.1

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. STEADY						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05		0.1				0.1
0.10		0.2				0.2
0.15		0.4				0.4
0.20						
0.25						
0.30						
0.35						
SUM		0.6				0.6

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1800, BY MISSION SEG. SUM						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.5				0.5
0.0		0.8				0.8
0.05		4.5				4.5
0.10		18.2				18.2
0.15		33.7	0.3			34.0
0.20		15.5	0.1			15.6
0.25		2.2				2.2
0.30		0.2				0.2
0.35						
SUM		75.5	0.4			75.9

MINUTES FOR CT/S VS MU BY RATE OF CLIMB -1500, BY MISSION SEG. MANUVR						
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.5				0.5
0.05		2.3				2.3
0.10		11.0				11.0
0.15		19.6	0.3			19.9
0.20		10.3				10.3
0.25		0.9				0.9
0.30						
0.35						
SUM		44.7	0.3			45.0

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG. DESCNT			
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0	0.4				0.4
0.05	0.1				0.1
0.10	1.2	0.1			1.3
0.15	2.4	0.3			2.7
0.20	2.1				2.1
0.25	0.5				0.5
0.30					
0.35					
SUM	6.8	0.4			7.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG. STEADY			
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0	0.1				0.1
0.05	0.1				0.1
0.10	0.5				0.5
0.15	1.2				1.2
0.20	0.7				0.7
0.25					
0.30					
0.35					
SUM	2.6				2.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1500, BY MISSION SEG.				SUM
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	1.0				1.0	
0.05	2.5				2.5	
0.10	12.7	0.1			12.8	
0.15	23.2	0.6			23.8	
0.20	13.2				13.2	
0.25	1.5				1.5	
0.30						
0.35						
SUM	54.1	0.7			54.8	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG. ASCENT			
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0					
0.05					
0.10					
0.15	0.3				0.3
0.20					
0.25					
0.30					
0.35					
SUM	0.3				0.3

TABLE XLI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB -1200, BY MISSION SEG. MANUVR			
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.8	0.1			0.8
0.05		9.8				9.8
0.10		38.9	0.1			39.0
0.15		82.2	0.6			82.8
0.20		33.3				33.3
0.25		3.4				3.4
0.30		0.1				0.1
0.35						
SUM		168.4	0.8			169.2

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB -1200, BY MISSION SEG. DESCNT			
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.7				0.7
0.0		0.5				0.5
0.05		4.0				4.0
0.10	0.1	7.4				7.5
0.15		14.6				14.6
0.20		6.7	0.6			7.3
0.25		0.2				0.2
0.30						
0.35						
SUM	0.1	34.2	0.6			34.8

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB -1200, BY MISSION SEG. STEADY			
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		0.4				0.4
0.0		0.2				0.2
0.05		0.2				0.2
0.10		2.4				2.4
0.15		8.9				8.9
0.20		6.2				6.2
0.25						
0.30						
0.35						
SUM		18.3				18.3

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB -1200, BY MISSION SEG.				SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		1.1				1.1
0.05		1.5	0.1			1.5
0.10	0.1	14.0				14.0
0.15		48.7	0.1			48.9
0.20		106.0	0.6			106.6
0.25		46.2	0.6			46.8
0.30		3.5				3.5
0.35		0.1				0.1
SUM	0.1	221.2	1.3			222.6

TABLE N1.1 - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. ASCENT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0						
0.05						
0.10	0.2					0.2
0.15	1.3					1.3
0.20	0.5					0.5
0.25						
0.30						
0.35						
SUM	2.0					2.0

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	1.5					1.5
0.05	8.8					8.8
0.10	43.4	0.3				43.8
0.15	77.7	0.7				78.4
0.20	22.8	1.4				24.1
0.25	2.0					2.0
0.30	0.1					0.1
0.35						
SUM	156.3	2.3				158.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. DESCNT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.3					0.3
0.05	0.6					0.6
0.10	2.3					2.3
0.15	11.5					11.5
0.20	24.6	0.1				24.7
0.25	10.9	0.2				11.1
0.30	0.7					0.7
0.35						
SUM	50.9	0.3				51.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.6					0.6
0.05	0.1					0.1
0.10	0.3					0.3
0.15	4.5					4.5
0.20	14.0	0.1				14.1
0.25	6.1					6.1
0.30						
0.35						
SUM	25.6	0.1				25.7

TABLE XII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-900, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		0.9					0.9
0.0		2.2					2.2
0.05		11.4					11.4
0.10		59.7	0.3				60.0
0.15		117.6	0.9				118.4
0.20		40.3	1.6				41.9
0.25		2.7					2.7
0.30		0.1					0.1
0.35							
SUM		234.8	2.8				237.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. ASCENT	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		0.9					0.9
0.0		0.7					0.7
0.05		1.0					1.0
0.10		5.4					5.4
0.15		11.2	0.1				11.3
0.20		2.8					2.8
0.25							
0.30							
0.35							
SUM		22.0	0.1				22.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. MANUVR	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		0.3					0.3
0.0		3.7	0.2				3.8
0.05		38.4	0.1				38.5
0.10		161.9	0.8				162.8
0.15		323.0	4.3				327.3
0.20		94.7	0.6				95.3
0.25		2.9					2.9
0.30							
0.35							
SUM		624.9	5.9				630.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. DESCNT	
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		4.9					4.9
0.0		9.9					9.9
0.05		29.2					29.2
0.10		64.2					64.2
0.15		83.2	0.3				83.5
0.20		40.0	0.7				40.7
0.25		1.7					1.7
0.30							
0.35							
SUM		233.1	1.0				234.1

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		5.7				5.7
0.0		4.7				4.7
0.05		2.1				2.1
0.10		43.7				43.7
0.15		161.9	0.7			162.5
0.20		52.3				52.3
0.25						
0.30						
0.35						
SUM		270.4	0.7			271.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-600, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		11.8				11.8
0.0		19.0	0.2			19.1
0.05		70.8	0.1			70.9
0.10		275.2	0.8			276.1
0.15		579.3	5.4			584.7
0.20		189.8	1.2			191.0
0.25		4.6				4.6
0.30						
0.35						
SUM		1150.4	7.7			1158.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-300, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		38.4				38.4
0.0		34.4				34.4
0.05		35.8				35.8
0.10		116.5	0.4			117.0
0.15		238.8				238.8
0.20		30.1				30.1
0.25						
0.30						
0.35						
SUM		494.0	0.4			494.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				-300, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		2.2	0.1		0.1	2.3
0.0		28.7				28.7
0.05		206.3	1.6	0.1		208.0
0.10		967.3	1.2			968.5
0.15		1553.5	11.8			1565.4
0.20		285.4	6.6			292.0
0.25		4.6	0.1			4.7
0.30						
0.35						
SUM		3048.1	21.3	0.1	0.1	3069.5

TABLE XLI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-300, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		15.0				15.0
0.0		29.2				29.2
0.05	0.3	92.8				93.1
0.10	0.2	191.4				191.6
0.15	0.4	200.3				200.8
0.20		76.4				76.4
0.25		1.5				1.5
0.30						
0.35						
SUM	0.9	606.7				607.6

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-300, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		258.2	1.2			259.4
0.0		171.5				171.5
0.05		83.3				83.3
0.10		820.8				820.8
0.15		2187.8	10.3			2198.2
0.20		738.8	0.7			739.5
0.25		1.2				1.2
0.30						
0.35						
SUM		4261.6	12.2			4273.9

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			-300, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15		SUM
LESS		313.8	1.3		0.1		315.1
0.0		263.8					263.8
0.05	0.3	418.3	1.6	0.1			420.3
0.10	0.2	2096.0	1.7				2097.9
0.15	0.4	4180.5	22.2				4203.1
0.20		1130.7	7.2				1138.0
0.25		7.2	0.1				7.3
0.30							
0.35							
SUM	0.9	8410.4	34.0	0.1	0.1		8445.4

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			300, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS		19.0				19.0
0.0		22.2	0.2			22.4
0.05		31.3				31.3
0.10		106.1	1.1			107.2
0.15		110.8	0.2			110.9
0.20		10.4				10.4
0.25						
0.30						
0.35						
SUM		299.8	1.5			301.3

TABLE XII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				300, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS	0.9				0.9	
0.0	1.9				1.9	
0.05	33.9				33.9	
0.10	235.0	0.8			235.8	
0.15	392.0	3.8			395.8	
0.20	71.8	0.7			72.5	
0.25	0.6				0.6	
0.30						
0.35						
SUM	736.2	5.3			741.5	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				300, BY MISSION SEG. DESCNT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS	1.0				1.0	
0.0	2.9				2.9	
0.05	4.5				4.5	
0.10	11.3				11.3	
0.15	11.1				11.1	
0.20	4.9				4.9	
0.25	0.2				0.2	
0.30						
0.35						
SUM	35.9				35.9	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				300, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
LESS	4.8				4.8	
0.0	4.7				4.7	
0.05	0.5				0.5	
0.10	50.0				50.0	
0.15	180.6				180.6	
0.20	47.6				47.6	
0.25						
0.30						
0.35						
SUM	288.2				288.2	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				300, BY MISSION SEG. SUM
LESS	0.06	0.09	0.12	0.15	SUM	
LESS	25.7				25.7	
0.0	31.7	0.2			31.9	
0.05	70.3				70.3	
0.10	402.4	1.9			404.3	
0.15	674.4	4.0			698.4	
0.20	134.7	0.7			135.4	
0.25	0.8				0.8	
0.30						
0.35						
SUM	1360.1	6.8			1366.8	

TABLE XII - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. ASCENT
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	2.2				2.2	
0.05	3.7				3.7	
0.10	7.6	0.3			7.9	
0.15	37.7	1.1			38.8	
0.20	20.7				20.7	
0.25	2.3				2.3	
0.30						
0.35						
SUM	74.3	1.4			75.7	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.4				0.4	
0.05	9.9				9.9	
0.10	73.7	0.3			74.1	
0.15	93.0	1.0			94.1	
0.20	15.1	0.2			15.4	
0.25	0.2	0.1			0.2	
0.30						
0.35						
SUM	192.3	1.6			194.0	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. DESCNT
LESS	0.06	0.09	0.12	0.15	SUM	
0.0						
0.05	0.3				0.3	
0.10	0.4				0.4	
0.15	0.6				0.6	
0.20	0.2				0.2	
0.25						
0.30						
0.35						
SUM	1.6				1.6	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				600, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.2				0.2	
0.05	0.9				0.9	
0.10	0.2				0.2	
0.15	5.9				5.9	
0.20	21.2				21.2	
0.25	5.7				5.7	
0.30						
0.35						
SUM	34.1				34.1	

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		600, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	SUM
LESS	2.4				2.4
0.0	5.0				5.0
0.05	18.0	0.3			18.3
0.10	117.8	1.5			119.2
0.15	135.6	1.0			136.6
0.20	23.4	0.2			23.6
0.25	0.2	0.1			0.2
0.30					
0.35					
SUM	302.3	3.0			305.3

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		900, BY MISSION SEG. ASCENT	
LESS	0.06	0.09	0.12	0.15	SUM
LESS	1.3				1.3
0.0	2.0				2.0
0.05	2.7				2.7
0.10	19.3				19.3
0.15	13.0				13.0
0.20	1.2				1.2
0.25					
0.30					
0.35					
SUM	39.5				39.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		900, BY MISSION SEG. MANUVR	
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0	0.9				0.9
0.05	8.5				8.5
0.10	51.3				51.3
0.15	90.6	0.8			91.4
0.20	17.4				17.4
0.25	0.4				0.4
0.30					
0.35					
SUM	169.1	0.8			169.9

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB		900, BY MISSION SEG. DESCNT	
LESS	0.06	0.09	0.12	0.15	SUM
LESS					
0.0					
0.05	0.1				0.1
0.10					
0.15					
0.20	0.2				0.2
0.25					
0.30					
0.35					
SUM	0.3				0.3

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.4				0.4	
0.05						
0.10	3.6				3.6	
0.15	17.3				17.3	
0.20	4.9				4.9	
0.25						
0.30						
0.35						
SUM	26.2				26.2	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				900, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	SUM		
0.0	1.7				1.7		
0.05	2.8				2.8		
0.10	11.3				11.3		
0.15	74.2				74.2		
0.20	120.9	0.8			121.7		
0.25	23.8				23.8		
0.30	0.4				0.4		
0.35							
SUM	235.2	0.8			236.0		

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1200, BY MISSION SEG. ASCENT
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.4				0.4	
0.05	0.5				0.5	
0.10	5.1	0.1			5.2	
0.15	3.3				3.3	
0.20	0.5				0.5	
0.25						
0.30						
0.35						
SUM	9.8	0.1			10.0	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1200, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
0.0	0.1				0.1	
0.05	2.6				2.6	
0.10	14.9				14.9	
0.15	19.9	0.1			20.0	
0.20	4.0				4.0	
0.25						
0.30						
0.35						
SUM	41.5	0.1			41.6	

TABLE NLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1200, BY MISSION SEG. STEADY
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.1				0.1	
0.05						
0.10	0.4				0.4	
0.15	1.4				1.4	
0.20	0.2				0.2	
0.25						
0.30						
0.35						
SUM	2.1				2.1	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1200, BY MISSION SEG.	SUM
LESS	0.06	0.09	0.12	0.15	SUM		
LESS							
0.0	0.6				0.6		
0.05	3.1				3.1		
0.10	20.4	0.1			20.5		
0.15	24.6	0.1			24.7		
0.20	4.7				4.7		
0.25							
0.30							
0.35							
SUM	53.5	0.2			53.7		

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG. ASCENT
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.4				0.4	
0.05	0.2				0.2	
0.10	0.2				0.2	
0.15	2.8				2.8	
0.20	2.0				2.0	
0.25	0.1				0.1	
0.30						
0.35						
SUM	5.7				5.7	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG. MANUVR
LESS	0.06	0.09	0.12	0.15	SUM	
LESS						
0.0	0.7				0.7	
0.05	3.4				3.4	
0.10	18.5				18.5	
0.15	33.7				33.7	
0.20	6.0				6.0	
0.25	0.2				0.2	
0.30						
0.35						
SUM	62.5				62.5	

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG. DESCNT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.1				0.1
0.05						
0.10						
0.15						
0.20						
0.25						
0.30						
0.35						
SUM		0.1				0.1

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG. STEADY
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10		0.1				0.1
0.15		0.4				0.4
0.20		0.1				0.1
0.25						
0.30						
0.35						
SUM		0.6				0.6

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1500, BY MISSION SEG.	SUM
	LESS	0.06	0.09	0.12	0.15	SUM	
LESS		0.4				0.4	
0.0		1.1				1.1	
0.05		3.6				3.6	
0.10		21.4				21.4	
0.15		36.1				36.1	
0.20		6.2				6.2	
0.25		0.2				0.2	
0.30							
0.35							
SUM		69.0				69.0	

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05						
0.10		0.3				0.3
0.15		0.8				0.8
0.20						
0.25						
0.30						
0.35						
SUM		1.1				1.1

TABLE XLI - Continued

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.2				0.2
0.05		1.0				1.0
0.10		6.2				6.2
0.15		8.9				8.9
0.20		2.0				2.0
0.25						
0.30						
0.35						
SUM		18.2				18.2

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				1800, BY MISSION SEG. SUM
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.2				0.2
0.05		1.0				1.0
0.10		6.5				6.5
0.15		9.8				9.8
0.20		2.0				2.0
0.25						
0.30						
0.35						
SUM		19.4				19.4

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION SEG. ASCENT
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0						
0.05		0.4				0.4
0.10		1.4				1.4
0.15		1.4				1.4
0.20		0.3				0.3
0.25						
0.30						
0.35						
SUM		3.5				3.5

MINUTES FOR CT/S VS MU		BY RATE OF CLIMB				2100, BY MISSION SEG. MANUVR
	LESS	0.06	0.09	0.12	0.15	SUM
LESS						
0.0		0.2				0.2
0.05		2.0				2.0
0.10		12.4				12.4
0.15		16.6	0.1			16.7
0.20		4.1				4.1
0.25		0.1				0.1
0.30						
0.35						
SUM		35.5	0.1			35.6

TABLE XLI - Continued

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			2100, BY MISSION SEG.	SUM
LESS	LESS	0.06	0.09	0.12	0.15	SUM	
0.0		0.2				0.2	
0.05		2.4				2.4	
0.10		13.8				13.8	
0.15		18.0	0.1			18.1	
0.20		4.3				4.3	
0.25		0.1				0.1	
0.30							
0.35							
SUM		38.9	0.1			39.0	

MINUTES FOR CT/S VS MU			BY RATE OF CLIMB			SUM, BY MISSION SEG.	SUM
LESS	LESS	0.06	0.09	0.12	0.15	SUM	
0.0		358.4	1.3		0.1	359.7	
0.05	0.3	330.1	0.4			330.5	
0.10	0.3	635.2	2.2	0.1		637.7	
0.15	0.3	3184.1	6.5			3190.8	
0.20	0.4	6122.1	36.7			6159.2	
0.25		1668.1	11.7			1679.8	
0.30		29.5	0.1			29.6	
0.35		0.9				0.9	
SUM		1.012328.3	58.9	0.1	0.112388.3		

TABLE XLII. TIME FOR ENGINE TORQUE VERSUS AIRSPEED
BY WEIGHT AND ALTITUDE, SAMPLE II

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT					7000 ,	BY ALTITUDE			1000
LESS	LESS	10	20	30	40	50	60	70	SUM
40	0.1	0.5	1.6	3.2					5.4
60	0.3	1.6		0.3					2.2
70	0.2	0.5		1.0					1.7
80	0.1	0.5	0.7	0.1					1.4
90		1.1	0.5						1.6
100	0.1	0.1	0.5	0.3					1.0
110	0.1	0.3	0.1	0.2					0.6
120			0.1	0.3	0.2				0.6
130				0.3	1.3				1.6
140					0.5				0.5
150				0.1	0.5				0.6
160									
170				0.1					0.1
180									
SUM	0.8	4.7	3.6	5.8	2.5				17.3

TABLE XLII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,							BY ALTITUDE 2000	
	LESS	10	20	30	40	50	60	70 SUM
LESS		1.3	3.5	10.8	3.6	0.9		20.0
40	0.6	5.1	1.7	0.6	1.2	0.6		9.9
60	0.2	1.9	4.4	1.8	2.8			11.1
70	0.6	3.0	13.6	9.0	2.4			28.6
80	0.5	1.7	20.7	27.5	4.2	0.5		55.2
90		2.8	22.2	33.9	3.3	0.3		62.5
100		1.9	7.6	48.4	12.3	0.2		70.4
110		1.3	9.0	26.5	6.5			43.4
120		0.1	3.9	20.3	4.1			28.4
130			1.5	1.4	4.4			7.6
140			1.8	0.2				1.9
150			0.2	0.2				0.5
160								
170				0.1				0.1
180								
SUM	2.0	19.1	10.4	190.5	44.7	2.6		339.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,							BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70 SUM
LESS								
40			0.2					0.2
60								
70			0.1	0.3		0.1		0.5
80			0.5					0.5
90			0.2					0.2
100								
110								
120								
130								
140								
150								
160								
170								
180								
SUM			0.9	0.3		0.1		1.3

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 7000 ,							BY ALTITUDE SUM	
	LESS	10	20	30	40	50	60	70 SUM
LESS	0.1	1.8	5.1	14.0	3.6	0.9		25.4
40	0.9	6.7	1.9	0.9	1.2	0.6		12.3
60	0.4	2.5	4.4	2.8	2.8			12.8
70	0.6	3.5	14.3	9.4	2.4	0.1		30.4
80	0.5	2.8	21.7	27.5	4.2	0.5		57.3
90	0.1	2.9	22.9	34.2	3.3	0.3		63.7
100	0.1	2.2	7.7	48.6	12.3	0.2		71.1
110		1.3	9.1	26.8	6.8			43.9
120		0.1	3.9	20.6	5.5			30.0
130			1.5	1.4	4.8			8.0
140			1.8	0.3	0.5			2.5
150			0.3	0.2				0.5
160				0.1				0.1
170				0.1				0.1
180								
SUM	2.7	23.8	94.9	186.7	47.2	2.7		358.0

TABLE XLII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	LESS
LESS	10	20	30	40	50	60	70	SUM
LESS	0.	1.7	7.8	3.3				13.3
40	0.5	1.	0.5	0.4	0.2			2.7
60	0.2	0.	0.6	0.6	0.4			2.1
70		0.	0.4	0.0				0.9
80		0.5	0.5					1.2
90			0.8					0.8
100		0.7	0.3					1.0
110		0.4	1.9					2.3
120		0.3	8.0					8.3
130			1.5					1.5
140			0.2					0.2
150								
160								
170								
180								
SUM	1.0	2.4	5.0	21.6	4.1	0.2		34.3

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	1000
LESS	10	20	30	40	50	60	70	SUM
LESS	2.9	9.6	42.5	108.7	45.1	1.7		210.5
40	7.0	29.	26.7	31.0	6.8	0.6		101.5
60	3.6	18.1	26.6	16.8	2.9	0.1		68.2
70	1.7	17.	46.5	21.2	3.2	0.6		91.0
80	2.2	16.0	73.2	46.0	6.3	0.1		143.8
90	1.1	6.5	89.6	72.8	8.2			178.5
100	0.4	4.5	30.4	36.0	9.3	0.1		79.6
110	0.1	2.1	11.2	32.0	6.8	0.1		52.1
120		0.1	1.7	30.0	6.2			38.4
130			1.1	16.0	4.9	0.1		22.1
140			0.2	1.3	0.3			1.8
150					0.1			0.1
160								
170								
180								
SUM	18.9	105.	349.3	411.7	99.1	3.4		987.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	2000
LESS	10	20	30	40	50	60	70	SUM
LESS	1.2	11.3	45.6	83.4	47.5	3.1		192.2
40	4.8	35.1	90.6	33.7	17.0	2.8		184.0
60	3.5	28.4	114.9	76.9	24.2	1.0		248.8
70	2.4	36.1	233.6	172.7	40.6	1.2		487.0
80	2.5	36.5	347.4	372.2	68.0	1.8		828.1
90	1.9	32.1	340.7	590.1	102.3	2.1		1069.3
100	0.6	13.7	237.0	624.0	160.4	2.4		1038.1
110	0.2	9.3	118.8	447.3	218.7	1.3		795.6
120	0.2	2.4	9.3	212.0	119.9	2.2		376.4
130		0.4	14.2	68.9	31.3	1.3		116.1
140		0.	3.9	11.2	1.9	0.8		18.0
150			1.8	3.3	0.7			5.8
160			1.4	0.6	0.2			2.2
170			0.3	0.4				0.7
180			0.1	0.5				0.6
SUM	17.3	205.4	1589.6	2697.1	832.9	20.0		5362.9

TABLE XLII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	5000
	LESS	10	20	30	40	50	60	70 SUM
LESS			0.5	2.9				3.4
40		2.3	2.0	1.3	0.3	0.1		6.0
60		0.5	5.3	1.9	0.1			7.7
70	0.2	3.1	7.9	3.0	0.2			14.4
80	0.9	7.8	13.4	2.0	0.1			24.2
90		0.9	5.7	18.0	0.6			25.3
100			2.5	3.2	2.6			8.3
110		0.4	3.7	3.8	3.5			11.5
120				2.6	6.2	0.4		9.2
130			2.9	3.5				6.4
140			0.3					0.3
150			0.3					0.3
160			0.2					0.2
170			0.2					0.2
180								
SUM	1.1	15.0	47.4	46.0	7.8	0.1		117.4

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 8000 ,							BY ALTITUDE	SUM
	LESS	10	20	30	40	50	60	70 SUM
LESS	4.1	21.4	90.2	202.9	95.9	4.8		419.4
40	12.6	68.2	119.2	66.0	24.5	3.7		294.2
60	7.3	47.4	147.4	96.2	27.5	1.1		326.9
70	4.3	57.6	288.5	196.9	44.0	1.8		593.1
80	5.6	60.3	434.5	420.7	74.4	1.9		997.3
90	3.0	39.8	436.1	681.7	111.1	2.1		1273.8
100	1.0	18.1	270.6	663.5	171.3	2.4		1127.0
110	0.3	11.7	134.2	485.0	229.1	1.3		861.5
120	0.2	3.3	43.9	256.1	126.6	2.2		432.3
130		0.4	18.2	89.8	36.2	1.4		146.1
140		0.1	4.3	12.7	2.3	0.8		20.3
150			2.1	3.3	0.8			6.1
160			1.6	0.6	0.2			2.4
170			0.5	0.4				0.9
180			0.1	0.5				0.6
SUM	38.3	328.4	1971.3	3176.5	943.9	23.6		6502.0

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							B ALTITUDE	LESS
	LESS	10	20	30	40	50	60	70 SUM
LESS			0.3	2.2	2.5			5.0
40		0.2		0.4	0.2			0.8
60					0.2			0.2
70				0.3				0.3
80				0.9				0.9
90				0.6				0.6
100				3.0				3.0
110				2.3				2.3
120				0.8				0.8
130				3.8				3.8
140								
150								
160								
170								
180								
SUM		0.2	0.3	14.2	2.9			17.6

TABLE XLII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE 1000	
	LESS	10	20	30	40	50	60	70 SUM
LESS	0.1	2.3	14.9	61.1	44.8	4.6		127.8
40	0.8	6.5	3.8	8.2	8.3	1.4		29.0
60	0.2	2.8	7.0	10.0	9.0	0.8		29.8
70	0.7	1.4	15.9	26.6	9.1	0.2		53.8
80	0.1	5.1	42.7	32.7	6.4	0.1		87.1
90	0.2	4.2	30.6	57.7	12.6			105.3
100		1.9	12.3	42.3	10.0			66.6
110		0.8	6.6	50.3	13.8	2.0		73.5
120		0.2	1.3	41.7	4.3	0.2		47.6
130		0.0	0.2	16.4	1.5			18.1
140				0.2				0.2
150				0.1				0.1
160				0.2				0.2
170								
180								
SUM	2.0	25.3	135.2	347.3	119.9	9.3		639.0

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE 2000	
	LESS	10	20	30	40	50	60	70 SUM
LESS	0.1	3.3	13.4	44.9	34.6	3.4		99.6
40	1.0	9.5	38.4	22.9	7.8	1.7		131.4
60	0.2	9.7	106.1	40.5	8.3	1.9		166.7
70	0.2	11.4	108.1	89.1	16.9	1.4		227.1
80	0.2	9.1	145.1	201.7	31.4	3.2		390.6
90	0.6	7.0	153.1	332.7	62.3	2.7		558.4
100	0.2	6.0	31.3	308.4	85.5	2.3		483.6
110	0.2	2.2	28.8	163.6	111.9	2.4		309.7
120		0.5	9.0	99.5	84.5	4.9		198.4
130		0.7	4.4	24.6	9.9	2.9		41.5
140		0.8	2.6	5.2	0.8	0.2		9.7
150			0.4	1.4	0.3			2.0
160				1.0	0.3			1.3
170								
180								
SUM	2.7	60.3	740.5	1335.5	453.6	27.1		2619.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE 5000	
	LESS	10	20	30	40	50	60	70 SUM
LESS			0.4	1.3	0.3			1.9
40			2.6	4.6	2.2			9.4
60		0.1	1.8	4.7	1.3			7.8
70		0.1	1.4	5.2	0.2			6.9
80	0.2	0.3	1.9	4.1				6.5
90	0.6	0.3	3.9	5.9				10.7
100	0.6	0.2	1.2	9.3	3.5			14.8
110		0.3	1.0	3.8	0.3			5.4
120		0.1	0.4	0.6				1.1
130			0.3					0.3
140			0.2					0.2
150			0.4					0.4
160								
170								
180								
SUM	1.4	1.4	15.4	39.4	7.8			65.4

TABLE XLII - Continued

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT 9000 ,							BY ALTITUDE		SUM
	LESS	10	20	30	40	50	60	70	SUM
LESS	0.2	5.6	29.0	109.4	82.2	8.0			234.3
40	1.7	16.2	94.3	36.2	19.6	3.2			170.7
50	0.4	12.7	114.8	55.2	19.9	2.7			204.4
70	0.8	13.0	125.3	121.2	26.3	1.6			288.2
80	0.5	14.5	189.7	239.4	37.7	3.3			485.1
90	1.5	11.5	187.6	396.8	75.0	2.7			675.0
100	0.8	8.1	14.8	363.0	98.9	2.3			568.0
110	0.2	3.4	36.3	220.0	126.1	4.4			390.3
120		0.8	10.7	142.5	89.8	5.1			248.0
130		0.7	4.9	44.8	10.4	2.9			63.7
140		0.8	2.8	5.4	0.8	0.2			10.1
150			0.7	1.5	0.3				2.4
160				1.2	0.3				1.5
170									
180									
SUM	6.2	87.2	891.4	1736.4	584.1	36.4			3341.7

MINUTES FOR TORQUE VS AIRSPEED BY WEIGHT							SUM,	BY ALTITUDE		SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	4.4	28.7	124.3	326.3	181.7	13.7			679.1	
40	15.2	91.2	215.9	103.1	44.2	7.5			477.2	
50	4.1	62.5	266.5	154.2	49.1	3.8			544.1	
70	5.6	74.0	428.2	327.5	72.7	3.5			911.8	
80	5.7	77.6	645.9	687.6	116.3	5.7			1539.7	
90	4.6	54.2	646.5	1112.7	189.4	5.1			2012.6	
100	1.9	28.5	373.1	1075.1	282.5	4.9			1766.1	
110	0.5	16.4	179.5	731.8	361.9	5.7			1295.8	
120	0.2	4.2	58.4	419.2	220.9	7.3			710.2	
130		1.1	24.9	136.0	51.5	4.3			217.8	
140		0.9	9.0	18.4	3.6	1.1			32.8	
150			3.1	4.9	1.0				9.1	
160			1.6	1.9	0.5				3.9	
170			0.5	0.5					0.9	
180			0.1	0.5					0.6	
SUM	47.2	439.4	2977.5	5099.6	1575.2	62.6			10201.6	

TABLE XLIII. TIME FOR ENGINE TORQUE VERSUS ROTOR RPM
BY MISSION SEGMENT, RATE OF CLIMB AND
OUTSIDE AIR TEMPERATURE, SAMPLE II

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1800, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1800, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.1					0.1		
325										
330										
340										
355										
SUM			0.1					0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.3					0.3		
325										
330										
340										
355										
SUM			0.3					0.3		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.3					0.3		
325										
330										
340										
355										
SUM			0.3					0.3		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310				0.3				0.3		
325										
330										
340										
355										
SUM				0.3				0.3		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.4	0.1				0.5		
325										
330										
340										
355										
SUM			0.4	0.1				0.5		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1	0.4	0.2			0.7		
310										
325										
330										
340										
355			0.1	0.4	0.2			0.7		
SUM										
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -900, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.5	0.9	0.2			1.6		
310										
325										
330										
340										
355			0.5	0.9	0.2			1.6		
SUM										
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.6				0.7		
310		0.1								
325										
330										
340										
355				0.6				0.7		
SUM		0.1								
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.4	2.6	2.3			5.3		
310			0.1					0.1		
325										
330										
340										
355			0.5	2.6	2.3			5.4		
SUM										
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295					0.2			0.2		
310			0.3	4.5	4.8	0.4		10.1		
325										
330										
340										
355			0.3	4.5	4.8	0.6		10.2		
SUM										
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.1	0.3			0.4		
310			0.5	0.7	1.1			2.3		
325										
330										
340										
355			0.5	0.7	1.2	0.3		2.7		
SUM										

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -600, BY OAT										SUM	
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.1	0.5			0.6			
310		1.3	7.8	8.8	0.4			18.4			
325		0.1						0.1			
330											
340											
355											
SUM		1.4	7.8	8.9	0.9			19.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT											50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			1.6					1.6			
325			0.6					0.6			
330											
340											
355											
SUM			2.2					2.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT											60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.2	1.0	1.4	0.2			2.9			
325											
330											
340											
355											
SUM		0.2	1.0	1.4	0.2			2.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT											70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.5	0.9	0.3			1.7			
310	0.8	10.5	101.1	26.7	1.9			141.0			
325		0.3	2.2					2.5			
330											
340											
355											
SUM	0.8	10.8	103.8	27.6	2.1			145.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT											80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			1.1	0.7	0.3			2.1			
310	0.3	6.8	93.0	58.2	5.6			163.9			
325		0.5	3.2	1.1				4.8			
330		0.2						0.2			
340											
355											
SUM	0.3	7.5	97.3	60.0	5.9			171.0			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY OAT											90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.3	0.7	0.3			1.3			
310	0.4	4.0	34.0	24.0	2.6			65.0			
325											
330											
340											
355											
SUM	0.4	4.0	34.3	24.7	2.9			66.3			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB -300, BY DAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				1.9	2.3	0.9			5.1	
310	1.5	21.5	230.8	110.3	10.3				374.4	
325		0.8	6.0	1.1					7.9	
330		0.2							0.2	
340										
355										
SUM	1.5	22.5	238.7	113.7	11.1				387.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300,	BY	OAT	60
	LESS	10	20	30	40	50	60	70	SUM				
LESS													
295													
310			0.1	0.9	0.1				1.1				
325				0.6					0.6				
330													
340													
355													
SUM			0.1	1.5	0.1				1.7				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300,	BY	DAT	70
	LESS	10	20	30	40	50	60	70	SUM				
LESS													
295				0.3		0.2			0.5				
310		0.4	4.7	47.5	28.4	2.8			83.7				
325				0.2	0.4				0.6				
330													
340													
355													
SUM		0.4	4.7	47.9	28.8	3.0			84.8				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300, BY DAT	80
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295			0.1	0.3	0.1	0.1			0.6		
310			1.5	63.2	37.0	2.6			104.3		
325			0.4	0.9	0.1				1.4		
330				0.3	0.1				0.4		
340											
355											
SUM			2.0	64.6	37.3	2.7			106.6		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300, BY DAT	90
LESS	LESS	10	20	30	40	50	60	70	SUM		
295						0.4			0.4		
310			0.9	15.3	12.4	1.4			30.1		
325				0.1	0.1				0.2		
330											
340											
355											
SUM			0.9	15.4	12.5	1.8			30.6		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										300,	BY	DAT	SUM
	LESS	10	20	30	40	50	60	70	SUM				
LESS													
295			0.1	0.5	0.1	0.7			1.4				
310		0.4	7.1	126.9	77.9	6.8			219.1				
325			0.4	1.8	0.6				2.8				
330				0.3	0.1				0.4				
340													
355													
SUM		0.4	7.7	129.5	78.7	7.5			223.7				

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310											
325			0.8						0.8		
330											
340											
355											
SUM			0.8						0.8		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	0.8	0.2				1.1			
325			1.2					1.2			
330											
340											
355											
SUM		0.1	2.0	0.2				2.3			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.3				0.3			
310		1.5	5.7	6.7	0.5			14.4			
325			0.8	0.2				1.0			
330											
340											
355											
SUM		1.5	6.5	7.2	0.5			15.7			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				1.1	0.2			1.3			
310		0.3	14.2	10.2	0.5			25.2			
325											
330											
340											
355											
SUM		0.3	14.2	11.2	0.7			26.5			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295					0.2			0.2			
310			3.5	6.5	2.6			12.7			
325											
330											
340											
355											
SUM			3.5	6.5	2.9			12.9			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				1.4	0.4			1.8			
310		1.9	24.2	23.6	3.7			53.4			
325			2.8	0.2				3.0			
330											
340											
355											
SUM		1.9	27.0	25.2	4.1			58.3			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310											
325			0.4					0.4			
330											
340											
355											
SUM			0.4					0.4			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310											
325			2.6					2.6			
330											
340											
355											
SUM			2.6					2.6			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.1	0.1			0.2			
310	0.2	0.2	4.5	5.9	0.2			11.0			
325			1.5					1.5			
330											
340											
355											
SUM	0.2	0.2	6.0	6.0	0.3			12.7			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.2	6.7	5.9	0.8			13.5			
325				0.1				0.1			
330											
340											
355											
SUM		0.2	6.7	6.0	0.8			13.6			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	1.4	3.7	1.1			6.3			
325											
330											
340											
355											
SUM		0.1	1.4	3.7	1.1			6.3			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB										900, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.1	0.1			0.2			
310	0.2	0.5	12.6	15.5	2.0			30.8			
325			4.6	0.1				4.7			
330											
340											
355											
SUM	0.2	0.5	17.2	15.7	2.1			35.7			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.2	0.2				0.4		
325										
330										
340										
355										
SUM			0.2	0.2				0.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.3	0.6	1.7				2.6		
325										
330										
340										
355										
SUM		0.3	0.6	1.7				2.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295				0.4				0.4		
310		0.0	1.4	2.7				4.1		
325										
330										
340										
355										
SUM		0.0	1.4	3.1				4.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.2	0.6				0.8		
325										
330										
340										
355										
SUM			0.2	0.6				0.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295				0.4				0.4		
310		0.4	2.4	5.1				7.9		
325										
330										
340										
355										
SUM		0.4	2.4	5.6				8.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310				0.2				0.2		
325										
330										
340										
355										
SUM				0.2				0.2		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.1				0.1		
310		0.1	2.1	0.4				2.6		
325										
330										
340										
355										
SUM		0.1	2.1	0.5				2.7		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.3	0.8	0.1			1.4		
325			0.1					0.1		
330										
340										
355										
SUM		0.1	0.4	0.8	0.1			1.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295					0.3			0.3		
310			0.1	0.5	0.1			0.7		
325				0.1				0.1		
330										
340										
355										
SUM			0.1	0.6	0.4			1.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.1	0.3			0.4		
310		0.2	2.5	2.0	0.2			4.9		
325			0.1	0.1				0.2		
330										
340										
355										
SUM		0.2	2.6	2.2	0.5			5.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.3					0.3		
325										
330										
340										
355										
SUM			0.3					0.3		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.3					0.3		
325										
330										
340										
355										
SUM			0.3					0.3		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 1800, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.6					0.6	
325										
330										
340										
355										
SUM				0.6					0.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.3	0.3	0.2			0.8	
325				0.2	0.1				0.3	
330				0.1					0.1	
340										
355										
SUM				0.6	0.4	0.2			1.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.5	0.8	0.4			1.7	
325					0.1				0.1	
330										
340										
355										
SUM				0.5	0.9	0.4			1.8	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310				0.2	0.1				0.3	
325										
330										
340										
355										
SUM				0.2	0.1				0.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. ASCENT, BY RATE OF CLIMB 2100, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310				1.0	1.2	0.6			2.9	
325				0.2	0.2				0.4	
330				0.1					0.1	
340										
355										
SUM				1.3	1.4	0.6			3.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB LESS, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310			1.8	0.4					2.2	
325		0.4	0.1						0.5	
330										
340										
355										
SUM		0.4	1.9	0.4					2.7	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										LESS, BY OAT	60
	LESS	10	20	30	40	50	60	70	SUM		
LESS	0.2								0.2		
295											
310		0.6	1.3	2.6	0.2	0.1			4.8		
325			0.1	0.1					0.2		
330											
340											
355											
SUM	0.2	0.6	1.4	2.7	0.2	0.1			5.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										LESS, BY OAT	70
	LESS	10	20	30	40	50	60	70	SUM		
LESS	0.3								0.3		
295	0.2				0.1				0.2		
310	0.2	1.8	6.9	12.8	3.3				25.0		
325		0.1	0.1	0.1					0.3		
330											
340											
355											
SUM	0.6	1.8	7.0	12.9	3.3				25.7		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										LESS, BY OAT	80
	LESS	10	20	30	40	50	60	70	SUM		
LESS	0.4								0.4		
295	0.2			0.3	0.1	0.1			0.6		
310	0.1	0.7	7.8	15.1	6.1	0.4			30.2		
325		0.4	0.3	0.1					0.8		
330											
340											
355											
SUM	0.6	1.2	8.0	15.5	6.2	0.4			32.0		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										LESS, BY OAT	90
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310		0.2	1.9	3.0	0.3				5.4		
325	0.1		0.2	0.1					0.4		
330	0.1								0.1		
340											
355											
SUM	0.2	0.2	2.1	3.1	0.3				5.8		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										LESS, BY OAT	SUM
	LESS	10	20	30	40	50	60	70	SUM		
LESS	0.8								0.8		
295	0.3			0.3	0.2	0.1			0.8		
310	0.3	3.3	19.7	34.0	9.8	0.4			67.5		
325	0.1	0.9	0.8	0.4					2.1		
330	0.1								0.1		
340											
355											
SUM	1.7	4.2	20.4	34.6	10.0	0.5			71.4		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100,										BY OAT	50
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310	0.4			0.4					0.8		
325											
330											
340											
355											
SUM	0.4			0.4					0.8		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295				0.4					0.4	
310										
325										
330										
340										
355										
SUM				0.4					0.4	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310		0.4	1.2	1.7	0.4				3.7	
325										
330										
340										
355										
SUM		0.4	1.2	1.7	0.4				3.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295						0.1			0.1	
310			2.1	5.0	2.2	0.1			9.4	
325			0.1	0.2	0.2				0.5	
330										
340										
355										
SUM			2.2	5.2	2.4	0.2			10.0	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.3			0.1					0.4	
310	0.1		0.5	1.7					2.3	
325										
330										
340										
355										
SUM	0.4		0.5	1.8					2.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -2100, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.3			0.1		0.1			0.5	
310	0.5	0.4	3.9	9.2	2.6	0.1			16.6	
325			0.1	0.2	0.2				0.5	
330										
340										
355										
SUM	0.8	0.4	4.0	9.5	2.8	0.2			17.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										50
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310	0.2	0.2	0.4	0.2					1.0	
325										
330										
340										
355										
SUM	0.2	0.2	0.4	0.2					1.0	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1								0.1	
310	0.1	0.6	1.3	1.0	0.3				3.3	
325										
330										
340										
355										
SUM	0.2	0.6	1.3	1.0	0.3				3.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.2								0.2	
295	0.3				0.1				0.4	
310	0.1	1.4	4.5	8.3	2.3				16.7	
325	0.1	0.4		0.1					0.6	
330	0.1								0.1	
340	0.1								0.1	
355										
SUM	0.8	1.8	4.5	8.5	2.4				18.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.1			0.1					0.2	
310	0.1	0.6	8.5	17.2	7.0	0.2			33.5	
325	0.1		0.1	0.2	0.1				0.5	
330		0.1							0.1	
340										
355										
SUM	0.3	0.7	8.6	17.5	7.1	0.2			34.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2								0.2	
310	0.4		1.5	4.2	0.5				6.7	
325	0.1	0.2	0.1						0.4	
330	0.1								0.1	
340										
355										
SUM	0.6	0.2	1.6	4.2	0.5				7.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1800, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.3								0.3	
295	0.7			0.1	0.1				0.8	
310	0.8	2.8	16.3	31.0	10.1	0.2			61.2	
325	0.2	0.6	0.2	0.3	0.1				1.4	
330	0.2	0.1							0.3	
340	0.1								0.1	
355										
SUM	2.2	3.5	16.5	31.4	10.3	0.2			64.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			1.0	0.6					1.6	
325			0.2	0.4					0.6	
330										
340										
355										
SUM			1.2	1.0					2.2	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	0.4	0.1	0.6	0.7					1.8	
325		0.2		0.2					0.4	
330										
340										
355										
SUM	0.4	0.3	0.6	0.9					2.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2								0.2	
310	0.3	1.0	6.5	3.0	1.0				11.8	
325										
330	0.2								0.2	
340										
355										
SUM	0.6	1.0	6.5	3.0	1.0				12.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.3								0.3	
310	0.2								0.2	
310	0.1	0.5	7.3	6.6	1.8				16.3	
325			0.4						0.4	
330										
340										
355										
SUM	0.6	0.5	7.7	6.6	1.8				17.2	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			0.7	0.9					1.6	
325										
330										
340										
355										
SUM			0.7	0.9					1.6	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1500, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.3								0.3	
310	0.3								0.3	
310	0.8	1.6	16.2	11.8	2.8				33.1	
325		0.2	0.6	0.6					1.4	
330	0.2								0.2	
340										
355										
SUM	1.6	1.8	16.8	12.4	2.8				35.4	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.4								0.4	
310	0.1		0.2	0.2					0.5	
325	0.1								0.1	
330										
340										
355										
SUM	0.6		0.2	0.2					1.0	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS									0.3	
295		0.3							4.7	
310		1.0	2.1	1.0	0.5				0.1	
325	0.1									
330										
340										
355									5.1	
SUM	0.1	1.3	2.1	1.0	0.5					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.2								0.2	
295	0.8								0.8	
310	0.3	4.7	18.6	23.0	6.1	0.3			52.9	
325	0.7	0.1	0.0						0.9	
330										
340										
355										
SUM	2.0	4.9	18.7	23.0	6.1	0.3			54.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295		0.1		0.1	0.1	0.5			0.8	
310	0.3	2.7	18.1	32.5	17.4	1.1			72.0	
325	0.1	0.2	0.5	0.9	0.1				1.8	
330										
340										
355										
SUM	0.5	3.0	18.6	33.4	17.5	1.6			74.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	0.3		2.3	10.9	3.3	0.2			17.1	
325										
330										
340										
355										
SUM	0.3		2.3	10.9	3.3	0.2			17.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -1200, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.3								0.3	
295	1.2	0.5		0.1	0.1	0.5			2.4	
310	1.0	8.3	41.3	67.6	27.3	1.6			147.2	
325	1.0	0.4	0.6	0.9	0.1				2.9	
330										
340										
355										
SUM	3.5	9.2	41.9	68.6	27.5	2.1			152.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS									0.2	
295	0.2								0.6	
310		0.2	0.4						0.8	
325		0.2		0.6						
330										
340										
355										
SUM	0.2	0.4	0.4	0.6					1.6	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.1	1.2	2.5	0.5				4.3	
325										
330										
340										
355										
SUM		0.1	1.2	2.5	0.5				4.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2	0.2							0.4	
310	0.3	7.6	23.6	19.7	2.6				53.9	
325		0.4	0.1	0.3					0.9	
330										
340										
355										
SUM	0.5	8.3	23.7	20.1	2.6				55.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.3								0.3	
295	0.5								0.5	
310	0.2	3.0	21.2	23.6	8.1	0.2			56.4	
325		0.6	0.1	0.3					1.0	
330										
340										
355										
SUM	1.1	3.6	21.3	24.0	8.1	0.2			58.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295					0.1	0.1			0.2	
310		0.4	3.1	4.5	0.2				8.2	
325		0.1							0.1	
330										
340										
355										
SUM		0.5	3.1	4.5	0.3	0.1			8.5	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -900, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.3								0.3	
295	0.9	0.2			0.1	0.1			1.4	
310	0.5	11.3	49.6	50.3	11.5	0.2			123.5	
325		1.3	0.2	1.3					2.8	
330										
340										
355										
SUM	1.8	12.9	49.8	51.6	11.6	0.3			127.9	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			0.4	0.4					0.8	
325			0.4	0.2					0.6	
330										
340										
355										
SUM			0.8	0.6					1.4	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295									10.9	
310		0.4	5.7	4.1	0.7				0.1	
325			0.1	0.1						
330										
340										
355									11.0	
SUM		0.4	5.8	4.1	0.7					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.4								0.4	
295	1.1	0.1	0.3	0.3	0.2				2.0	
310	0.2	16.5	78.7	94.3	18.1	0.4			208.2	
325	0.3	0.3	0.2						0.8	
330									0.1	
340	0.1									
355									211.6	
SUM	2.0	16.9	79.3	94.6	18.3	0.4				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.6	0.3				0.1			1.1	
295	1.1	0.1		0.5		0.7			2.4	
310	0.5	12.3	66.6	116.5	46.2	1.2			243.4	
325	0.1	0.8	2.0	1.1	0.1				4.1	
330	0.1								0.1	
340										
355									251.0	
SUM	2.4	13.6	68.6	118.0	46.3	2.0				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.1			0.1	0.2				0.4	
310	0.3	3.7	12.5	25.7	5.8	0.2			48.2	
325		0.3	0.5						0.8	
330										
340										
355									49.4	
SUM	0.4	4.0	13.0	25.8	6.0	0.2				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -600, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	1.1	0.3				0.1			1.5	
295	2.3	0.3	0.3	0.9	0.4	0.7			4.8	
310	1.0	32.9	164.0	241.0	70.8	1.8			511.5	
325	0.4	1.4	3.1	1.3	0.1				6.4	
330	0.1								0.1	
340	0.1								0.1	
355									524.4	
SUM	4.9	34.9	167.4	243.2	71.3	2.6				

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295									3.1	
310			0.7	2.4					1.5	
325		0.2	0.5	0.8						
330										
340										
355									4.7	
SUM		0.2	1.2	3.2						

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.2					0.2	
310		1.4	13.8	30.9	10.6	0.1			56.8	
325										
330										
340										
355										
SUM		1.4	13.8	31.1	10.6	0.1			57.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.3		0.6	0.6	2.0	0.4			3.9	
310	2.2	29.3	418.5	459.4	79.3	2.6			991.2	
325	0.7	1.4	0.1	0.4					2.6	
330	0.5								0.5	
340										
355										
SUM	3.7	30.7	419.2	460.4	81.2	2.9			998.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.8		0.1						0.9	
295	0.5	1.4	0.1	0.7	1.0	0.4			4.3	
310	1.4	29.6	388.7	538.8	194.1	4.2			1156.6	
325		3.5	8.3	5.0	0.8				17.6	
330										
340										
355										
SUM	2.8	34.5	397.2	544.5	195.9	4.6			1179.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1				1.0	0.3			1.3	
310	0.3	13.2	122.7	125.4	19.9				281.4	
325		0.5		0.1					0.6	
330	0.1								0.1	
340										
355										
SUM	0.4	13.6	122.7	125.5	20.9	0.3			283.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB -300, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.8		0.1						0.9	
295	0.9	1.4	0.8	1.6	4.0	1.1			9.7	
310	3.9	73.4	944.3	1156.8	303.8	6.8			2489.2	
325	0.7	5.6	8.9	6.3	0.8				22.3	
330	0.5								0.5	
340										
355										
SUM	6.8	80.5	954.1	1164.7	308.6	7.9			2522.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 300, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			0.9	2.2					3.1	
325			0.5						0.5	
330			0.2						0.2	
340										
355										
SUM			1.6	2.2					3.8	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									300, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM		
295	0.1	0.4	0.2	2.1				11.8		
310		0.4	0.0					0.1		
325			0.1							
330										
340										
355										
SUM	0.1	0.4	2.3	8.2	2.1			13.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									300, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM		
295		0.1	0.1	0.7	0.6			1.5		
310		3.1	62.8	124.4	31.8	1.1		223.2		
325		0.7	0.5	0.3				1.5		
330										
340										
355										
SUM	3.9	63.3	124.8	32.5	1.7			226.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									300, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM		
295			0.6	2.5	0.4			3.5		
310	0.4	4.6	55.5	154.2	87.9	1.0		303.5		
325	0.1	0.3	1.4	2.3	0.5			4.5		
330		0.1						0.1		
340										
355										
SUM	0.5	5.0	56.9	157.1	90.9	1.4		311.7		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									300, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.4				0.5		
310		0.7	11.2	42.3	9.0	0.2		63.4		
325		0.1		0.1				0.2		
330										
340										
355										
SUM	0.8	11.2	42.4	9.5	0.2			64.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									300, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM		
295	0.1	0.1	0.4	1.0	3.7	1.0		6.3		
310	0.4	8.8	131.7	331.1	130.8	2.3		605.1		
325	0.1	1.1	2.5	2.6	0.5			6.8		
330		0.1	0.2					0.3		
340										
355										
SUM	0.6	10.0	135.3	334.7	135.0	3.3		618.9		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR. BY RATE OF CLIMB									600, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM		
295								4.5		
310		0.8	3.6					1.4		
325		0.2	0.4	0.8						
330										
340										
355										
SUM	0.2	1.2	4.5					5.9		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.2	0.3	1.8	0.5					2.9		
325											
330											
340											
355											
SUM	0.2	0.3	1.8	0.5					2.9		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
295			0.3					0.3			
310	0.8	13.9	24.8	6.9				46.5			
325	0.1	0.1	0.3					0.6			
330											
340											
355											
SUM	0.9	14.1	25.5	6.9				47.4			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
295	0.1		0.1	1.1	0.1			1.4			
310		0.6	9.7	38.8	34.4	0.7		84.2			
325	0.1	0.1	0.2	0.3				0.7			
330											
340											
355											
SUM	0.4	0.7	9.9	39.2	35.5	0.8		86.5			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.1	1.4	7.1	3.6	0.1			12.2			
325											
330											
340											
355											
SUM	0.1	1.4	7.1	3.6	0.1			12.2			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295	0.1		0.4	1.1	0.1			1.7			
310		1.6	26.1	76.1	45.5	0.8		150.2			
325	0.1	0.4	0.8	1.5				2.7			
330											
340											
355											
SUM	0.4	2.0	26.9	78.0	46.5	0.9		154.8			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB										900, BY OAT	50
LESS	10	20	30	40	50	60	70	SUM			
295											
310			0.6					0.6			
325			0.4					0.4			
330											
340											
355											
SUM			1.0					1.0			

TABLE NLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 900, BY OAT 60									
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295									
310		0.5	2.2	0.9				3.6	
325	0.1		0.1	0.1				0.3	
330									
340									
355									
SUM	0.1	0.5	2.3	1.0				3.9	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 900, BY OAT 70									
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295		0.2		0.2				0.4	
310	0.5	10.9	28.5	10.7	0.3			50.9	
325	0.3	0.1	0.3					0.7	
330									
340									
355									
SUM	0.8	11.1	28.8	10.9	0.3			52.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 900, BY OAT 80									
LESS	10	20	30	40	50	60	70	SUM	
LESS					0.1			0.1	
295			0.1	0.5	0.4			1.0	
310	0.8	9.6	36.5	31.3	1.4			79.5	
325		0.6	0.9	0.5				2.1	
330									
340									
355									
SUM	0.8	10.3	37.4	32.4	1.8			82.7	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 900, BY OAT 90									
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295			0.1	0.2				0.3	
310	0.3	2.5	8.9	3.1	0.1			14.9	
325		0.1						0.1	
330									
340									
355									
SUM	0.3	2.5	9.0	3.3	0.1			15.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 900, BY OAT SUM									
LESS	10	20	30	40	50	60	70	SUM	
LESS					0.1			0.1	
295		0.2	0.2	1.0	0.4			1.8	
310	1.6	23.5	76.7	46.0	1.8			149.5	
325	0.4	0.8	1.7	0.6				3.5	
330									
340									
355									
SUM	2.0	24.5	78.6	47.6	2.3			154.9	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT 50									
LESS	10	20	30	40	50	60	70	SUM	
LESS									
295									
310		1.0	0.4					1.4	
325		0.2	0.2					0.4	
330									
340									
355									
SUM		1.2	0.6					1.8	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.3	0.4	0.6				1.3		
325		0.1						0.1		
330										
340										
355										
SUM		0.3	0.4	0.6				1.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		1.3	6.4	2.0	0.9			10.6		
325										
330										
340										
355										
SUM		1.3	6.4	2.0	0.9			10.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295				0.6				0.6		
310	0.1	1.8	8.8	3.9	0.6			13.2		
325			0.2	0.2				0.4		
330										
340										
355										
SUM	0.1	1.8	8.9	4.7	0.6			16.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.3	1.9	1.7				3.9		
325										
330										
340										
355										
SUM		0.3	1.9	1.7				3.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295				0.6				0.6		
310	0.1	4.6	17.9	8.3	1.6			32.5		
325		0.3	0.4	0.2				0.8		
330										
340										
355										
SUM	0.1	4.9	18.3	9.1	1.6			33.9		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										50
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.4	0.4					0.8		
325			0.4					0.4		
330										
340										
355										
SUM		0.4	0.8					1.2		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295						0.2			0.2	
310				0.0	0.2				1.0	
325				0.1					0.1	
330										
340										
355										
SUM				0.9	0.2	0.2			1.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295						0.5			0.5	
310		0.2	2.3	10.3	4.6	0.4			17.9	
325			0.1						0.1	
330										
340										
355										
SUM		0.2	2.4	10.3	4.6	0.9			18.5	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295					0.3	0.1			0.4	
310	0.1	0.4	3.9	13.1	10.8	0.9			29.3	
325			0.2	0.2					0.4	
330										
340										
355										
SUM	0.1	0.4	4.1	13.3	11.2	1.0			30.1	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.1	0.8	3.6	2.3	0.4			7.2	
325				0.1					0.1	
330										
340										
355										
SUM		0.1	0.8	3.7	2.3	0.4			7.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1500, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295					0.3	0.8			1.2	
310	0.1	0.7	7.4	28.2	18.0	1.7			50.2	
325			0.3	0.8					1.1	
330										
340										
355										
SUM	0.1	0.7	7.7	29.0	18.3	2.6			50.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY OAT										50
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310			0.1						0.1	
325			0.3	0.1					0.4	
330				0.1					0.1	
340										
355										
SUM			0.4	0.2					0.6	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY DAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310			0.2		0.2			0.4		
325										
330										
340										
355										
SUM			0.2		0.2			0.4		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY DAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.3		0.4			0.7		
310		1.6	2.1	1.0				4.7		
325	0.1		0.2					0.3		
330										
340										
355										
SUM	0.1	1.6	2.6	1.0	0.4			5.8		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY DAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.1				0.1		
310		0.8	3.3	2.5	0.3			7.0		
325		0.1	0.1	0.1				0.3		
330										
340										
355										
SUM		1.0	3.4	2.7	0.3			7.4		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY DAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295				0.3	0.1			0.4		
310	0.1	0.3	0.5	1.0	0.1			2.1		
325										
330										
340										
355										
SUM	0.1	0.3	0.5	1.4	0.2			2.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 1800, BY DAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.3	0.4	0.5			1.2		
310	0.1	2.8	6.1	4.6	0.6			14.3		
325	0.1	0.4	0.4	0.1				1.0		
330			0.1					0.1		
340										
355										
SUM	0.2	3.2	7.0	5.1	1.1			16.7		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY DAT										50
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		0.1	0.6					0.7		
325		0.1						0.1		
330										
340										
355										
SUM		0.2	0.6					0.8		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1				0.1	0.2			0.4	
310			0.1	0.3	0.2				0.6	
325			0.1						0.1	
330										
340										
355										
SUM	0.1		0.2	0.3	0.3	0.2			1.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										70
LESS	LESS	10	20	30	40	50	60	70	SUM	
295					0.1	0.2			0.3	
310		0.2	1.7	6.3	3.8	0.5			12.6	
325		0.1	0.0						0.2	
330		0.0							0.0	
340										
355										
SUM		0.4	1.8	6.3	3.9	0.7			13.1	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										80
LESS	LESS	10	20	30	40	50	60	70	SUM	
295					0.1	0.3			0.4	
310			1.3	6.0	6.7	0.5			14.5	
325			0.2	0.3					0.5	
330										
340										
355										
SUM			1.5	6.3	6.9	0.8			15.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										90
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310			0.5	1.8	1.2	0.3			3.8	
325		0.1							0.1	
330										
340										
355										
SUM		0.1	0.5	1.8	1.2	0.3			3.8	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. MANUVR, BY RATE OF CLIMB 2100, BY OAT										SUM
LESS	LESS	10	20	30	40	50	60	70	SUM	
295	0.1				0.3	0.7			1.2	
310		0.2	3.7	14.9	12.0	1.3			32.1	
325		0.2	0.4	0.3					0.8	
330		0.0							0.1	
340										
355										
SUM	0.1	0.4	4.1	15.2	12.3	2.1			34.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										60
LESS	LESS	10	20	30	40	50	60	70	SUM	
295										
310		0.1	0.2						0.3	
325										
330										
340										
355										
SUM		0.1	0.2						0.3	

TABLE XIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.3	0.3	0.2	0.3	0.1			1.3		
325										
330										
340										
355										
SUM	0.3	0.3	0.2	0.3	0.1			1.3		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.1	0.6	0.2	0.1				1.1		
325										
330	0.1							0.1		
340										
355										
SUM	0.2	0.6	0.2	0.1				1.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.1	0.1						0.2		
325										
330										
340										
355										
SUM	0.1	0.1						0.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB LESS, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.6	1.3	0.4	0.4	0.1			2.9		
325										
330	0.1							0.1		
340										
355										
SUM	0.7	1.3	0.4	0.4	0.1			3.0		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS	0.3							0.3		
295										
310	0.1	0.1						0.2		
325										
330										
340										
355										
SUM	0.3	0.1	0.1					0.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310	0.2	0.1	0.1					0.4		
325										
330	0.1							0.1		
340										
355										
SUM	0.3	0.1	0.1					0.5		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -2100, BY OAT										SUM
	LESS	10	20	30	40	50	60	70		SUM
LESS	0.3									0.3
295										0.6
310		0.3	0.2	0.1						
325										0.1
330		0.1								
340										
355										1.0
SUM	0.3	0.4	0.2	0.1						
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										70
	LESS	10	20	30	40	50	60	70		SUM
LESS	0.2									0.2
295										2.2
310	0.2	0.5	0.6	0.5	0.1	0.2				0.1
325		0.1								
330										
340										
355										2.5
SUM	0.4	0.6	0.6	0.5	0.1	0.2				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										80
	LESS	10	20	30	40	50	60	70		SUM
LESS	0.1									0.1
295	0.2									0.2
310	0.1	0.9	0.6							1.5
325	0.1	0.2								0.3
330										
340										
355										2.1
SUM	0.4	1.1	0.6							
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										90
	LESS	10	20	30	40	50	60	70		SUM
LESS										0.1
295					0.1					1.5
310	0.1	0.5		0.6	0.2					0.1
325		0.1								
330										
340										
355										1.7
SUM	0.1	0.6		0.6	0.3					
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1800, BY OAT										SUM
	LESS	10	20	30	40	50	60	70		SUM
LESS	0.3									0.3
295	0.2				0.1					0.3
310	0.4	1.9	1.3	1.2	0.3	0.2				5.3
325	0.1	0.4								0.5
330										
340										
355										6.4
SUM	0.9	2.3	1.3	1.2	0.4	0.2				
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										70
	LESS	10	20	30	40	50	60	70		SUM
LESS	0.4									0.4
295		0.1								0.1
310		1.4	0.6	0.3						2.3
325										
330										
340										
355										2.8
SUM	0.4	1.5	0.6	0.3						

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295				0.1					0.1	
310		0.6	0.2	0.5					1.3	
325										
330										
340										
355										
SUM		0.6	0.2	0.6					1.4	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.4	0.5						0.9	
325										
330										
340										
355										
SUM		0.4	0.5						0.9	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1500, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.4								0.4	
295		0.1		0.1					0.2	
310		2.4	1.3	0.8					4.5	
325										
330										
340										
355										
SUM	0.4	2.5	1.3	0.9					5.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.4	0.1	1.4					1.9	
325										
330										
340										
355										
SUM		0.4	0.1	1.4					1.9	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	0.1							0.2	
310	0.2	3.5	6.0	2.2	0.4	0.1			12.4	
325	0.6	0.9							1.5	
330										
340										
355										
SUM	0.9	4.4	6.0	2.2	0.4	0.1			14.1	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	0.2	2.0	3.6	1.5	0.5				7.8	
325	0.4	0.4							0.8	
330										
340										
355										
SUM	0.5	2.4	3.6	1.5	0.5				8.6	

TABLE XIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		1.0	1.6	0.3	0.4				3.3	
325		0.4							0.4	
330										
340										
355										
SUM		1.4	1.6	0.3	0.4				3.7	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -1200, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	0.1							0.2	
310	0.4	6.8	11.3	5.4	1.4	0.1			25.4	
325	1.0	1.7							2.7	
330										
340										
355										
SUM	1.5	8.6	11.3	5.4	1.4	0.1			28.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.9	0.1						1.0	
325										
330										
340										
355										
SUM		0.9	0.1						1.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295					0.2				0.2	
310	0.4	6.9	4.8	2.3	1.0				15.5	
325	0.1	0.3							0.4	
330										
340										
355										
SUM	0.6	7.2	4.8	2.3	1.2				16.2	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.2	0.1							0.3	
310	0.1	5.0	6.6	1.9	1.2				14.8	
325	0.2	0.3							0.5	
330										
340										
355										
SUM	0.5	5.4	6.6	1.9	1.2				15.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	0.1	0.5	1.8	0.6					3.0	
325	0.1								0.1	
330										
340										
355										
SUM	0.2	0.5	1.8	0.6					3.1	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -900, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS	0.1								0.1	
295	0.2	0.1			0.2				0.5	
310	0.6	13.3	13.3	4.9	2.2				34.3	
325	0.4	0.6							1.0	
330										
340										
355										
SUM	1.3	14.0	13.3	4.9	2.4				36.0	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310	0.3	2.1	0.4					2.8		
325										
330										
340										
355										
SUM	0.3	2.1	0.4					2.8		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295			0.1						0.1	
310	3.8	27.3	26.2	17.6	2.4				77.3	
325	0.4	0.7	0.1						1.2	
330										
340										
355										
SUM	4.2	28.0	26.4	17.6	2.4				78.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	1.2		0.2	0.4				1.9	
310	4.0	21.8	34.9	14.2	2.2				77.1	
325	1.0	3.4	0.9	0.3					5.7	
330	0.1	0.1							0.1	
340										
355										
SUM	5.2	26.5	35.8	14.8	2.6				84.8	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310	1.0	9.1	7.0	4.0	1.0	0.1			22.2	
325	0.5	0.9							1.5	
330										
340										
355										
SUM	1.5	10.1	7.0	4.0	1.0	0.1			23.7	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -600, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	1.2	0.1	0.2	0.4				2.0	
310	8.8	58.6	70.2	36.2	5.6	0.1			179.5	
325	2.0	5.0	1.0	0.3					8.3	
330	0.1	0.1							0.1	
340										
355										
SUM	11.0	64.9	71.3	36.7	6.0	0.1			190.0	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		1.3	1.9	2.8					6.0	
325	0.1								0.1	
330										
340										
355										
SUM	0.1	1.3	1.9	2.8					6.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295		0.3	0.4	0.1	0.1				0.8	
310	2.0	47.9	86.2	35.2	3.4	0.1			174.7	
325	0.4	1.8	1.0						3.2	
330										
340										
355										
SUM	2.4	49.9	87.5	35.3	3.5	0.1			178.7	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	1.6	1.0	0.4	0.5				3.7	
310	1.5	57.5	91.9	42.2	7.9	0.2			201.1	
325	0.7	2.7	4.4	0.7					8.6	
330		0.7							0.7	
340										
355										
SUM	2.3	62.6	97.2	43.4	8.4	0.2			214.1	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295					0.4				0.4	
310	1.3	19.8	29.9	13.5	1.9	0.2			66.6	
325	0.4	2.0	0.4						2.8	
330										
340										
355										
SUM	1.6	21.8	30.3	13.5	2.3	0.2			69.9	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB -300, BY OAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295	0.1	1.9	1.4	0.5	1.1				4.9	
310	4.7	126.4	209.8	93.7	13.1	0.5			448.4	
325	1.6	6.5	5.8	0.7					14.7	
330		0.7							0.7	
340										
355										
SUM	6.4	135.6	217.0	95.0	14.2	0.5			468.8	
MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 300, BY OAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.1							0.1	
325		0.2							0.2	
330										
340										
355										
SUM		0.3							0.3	

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300, BY OAT	70
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295				0.2	0.4				0.6		
310	0.3	2.7	2.4	2.1	1.6				9.1		
325	0.2	0.3	0.1						0.6		
330	0.2								0.2		
340											
355											
SUM	0.7	2.9	2.5	2.3	2.0				10.4		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300, BY OAT	80
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295	0.1			0.1					0.2		
310		2.1	6.0	5.2	0.6				14.0		
325		0.3	0.4						0.7		
330		0.1							0.1		
340											
355											
SUM	0.1	2.5	6.4	5.3	0.6				15.0		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300, BY OAT	90
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310		0.3	3.0	1.4	1.0				5.7		
325	0.1	0.3							0.4		
330		0.1							0.1		
340											
355											
SUM	0.1	0.7	3.0	1.4	1.0				6.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										300, BY OAT	SUM
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295	0.1			0.3	0.4				0.8		
310	0.3	5.2	11.4	8.7	3.2				28.8		
325	0.3	1.1	0.5						1.9		
330	0.2	0.2							0.4		
340											
355											
SUM	0.9	6.5	11.9	9.0	3.6				31.9		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY OAT	70
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310			0.4	0.1					0.5		
325											
330											
340											
355											
SUM			0.4	0.1					0.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY OAT	80
	LESS	10	20	30	40	50	60	70	SUM		
LESS											
295											
310		0.4	0.2						0.6		
325											
330											
340											
355											
SUM		0.4	0.2						0.6		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.2							0.2			
325											
330											
340											
355											
SUM	0.2							0.2			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										600, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.6	0.6	0.1					1.4			
325											
330											
340											
355											
SUM	0.6	0.6	0.1					1.4			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
295											
310			0.2					0.2			
325											
330											
340											
355											
SUM			0.2					0.2			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.1							0.1			
325											
330											
340											
355											
SUM	0.1							0.1			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										900, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
295											
310	0.1		0.2					0.3			
325											
330											
340											
355											
SUM	0.1		0.2					0.3			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB										1500, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
295											
310				0.1				0.1			
325											
330											
340											
355											
SUM				0.1				0.1			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. DESCNT, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310				0.1				0.1		
325										
330										
340										
355										
SUM				0.1				0.1		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.1	0.2					0.3		
325										
330										
340										
355										
SUM		0.1	0.2					0.3		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.2					0.2		
325										
330										
340										
355										
SUM			0.2					0.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1800, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.1	0.4					0.5		
325										
330										
340										
355										
SUM		0.1	0.4					0.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.2	0.6					0.9		
325										
330										
340										
355										
SUM		0.2	0.6					0.9		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.5					0.5		
325										
330										
340										
355										
SUM			0.5					0.5		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295										
310			0.3	0.2				0.5		
325										
330										
340										
355										
SUM			0.3	0.2				0.5		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.2	1.5	0.2				1.9		
325										
330										
340										
355										
SUM		0.2	1.5	0.2				1.9		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.3	0.6	0.1				1.0		
325										
330										
340										
355										
SUM		0.3	0.6	0.1				1.0		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.2	1.5	5.7	1.0			8.4		
325										
330										
340										
355										
SUM		0.2	1.5	5.7	1.0			8.4		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.6	4.2	1.7				6.6		
325										
330										
340										
355										
SUM		0.6	4.2	1.7				6.6		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295										
310			1.0	0.6				1.6		
325										
330										
340										
355										
SUM			1.0	0.6				1.6		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -1200, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310	0.2	2.5	11.5	3.4				17.6		
325										
330										
340										
355										
SUM	0.2	2.5	11.5	3.4				17.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.4						0.4		
325										
330										
340										
355										
SUM		0.4						0.4		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
295										
310		5.3	7.3	1.1				13.8		
325										
330										
340										
355										
SUM		5.3	7.3	1.1				13.8		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.3				0.4		
310		0.6	3.4	1.4	0.2			5.7		
325										
330	0.1							0.1		
340										
355										
SUM	0.1	0.6	3.5	1.7	0.2			6.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
295				0.1				0.1		
310			1.2	0.4				1.6		
325										
330										
340										
355										
SUM			1.2	0.5				1.7		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -900, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295			0.1	0.4				0.5		
310		6.4	11.9	2.9	0.2			21.4		
325										
330	0.1							0.1		
340										
355										
SUM	0.1	6.4	12.0	3.4	0.2			22.1		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY DAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.2	4.6	5.3	0.9				11.1	
325										
330										
340										
355										
SUM		0.2	4.6	5.3	0.9				11.1	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY DAT										70
	LESS	10	20	30	40	50	60	70	SUM	
LESS					0.1				0.1	
295										
310		1.4	25.9	67.0	16.1				110.5	
325			0.2						0.2	
330										
340										
355										
SUM		1.4	26.1	67.0	16.2				110.8	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY DAT										80
	LESS	10	20	30	40	50	60	70	SUM	
LESS					0.1				0.1	
295										
310		0.8	21.6	52.5	11.3	0.3			86.6	
325			0.1						0.1	
330										
340										
355										
SUM		0.8	21.7	52.5	11.4	0.3			86.8	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY DAT										90
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.2	2.1	13.1	4.0	0.2			19.6	
325										
330										
340										
355										
SUM		0.2	2.1	13.1	4.0	0.2			19.6	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -600, BY DAT										SUM
	LESS	10	20	30	40	50	60	70	SUM	
LESS					0.1				0.1	
295					0.1				0.1	
310		2.7	54.3	137.9	32.4	0.5			227.8	
325			0.3						0.3	
330										
340										
355										
SUM		2.7	54.6	137.9	32.6	0.5			228.3	

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY DAT										60
	LESS	10	20	30	40	50	60	70	SUM	
LESS										
295										
310		0.4	55.1	83.5	7.8				146.8	
325										
330										
340										
355										
SUM		0.4	55.1	83.5	7.8				146.8	

TABLE XIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		2.0	3.7	5.2				9.0		
310	16.0	489.1	1061.5	195.1	2.3			1764.0		
325		1.6						1.6		
330										
340										
355										
SUM	16.0	492.8	1065.2	198.3	2.3			1774.6		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		0.6	7.4	2.7	0.6			11.4		
310	13.9	328.5	681.6	188.7	1.4			1214.1		
325	0.4	5.3	3.2					8.9		
330			2.7					2.7		
340										
355										
SUM	14.3	334.4	694.9	191.4	2.0			1237.1		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										90
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		1.7		1.2	0.2			3.1		
310	4.1	145.0	153.5	40.2	0.4			343.2		
325			0.6					0.6		
330										
340										
355										
SUM	4.1	146.8	154.1	47.9	0.6			353.5		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB -300, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295		4.4	11.2	12.4	0.9			28.8		
310	34.4	1017.7	1980.0	431.8	4.2			3468.1		
325	0.4	6.9	3.9					11.2		
330			2.7					2.7		
340										
355										
SUM	34.8	1029.0	1997.7	445.5	5.0			3512.0		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										60
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295										
310		1.9	5.0	0.2				7.2		
325										
330										
340										
355										
SUM		1.9	5.0	0.2				7.2		
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 300, BY OAT										70
LESS	10	20	30	40	50	60	70	SUM		
LESS										
295			0.1	0.5				0.6		
310	0.3	21.0	73.4	26.4	0.2			121.3		
325										
330										
340										
355										
SUM	0.3	21.0	73.5	27.0	0.2			121.9		

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										300, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				1.0				1.0			
310		11.0	53.8	34.1	0.2			99.1			
325		0.1						0.1			
330											
340											
355											
SUM		11.1	53.8	35.1	0.2			100.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										300, BY OAT	90
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.1				0.1			
310		2.9	17.5	7.5	0.1			28.0			
325											
330											
340											
355											
SUM		2.9	17.5	7.6	0.1			28.1			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										300, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295			0.1	1.6				1.7			
310	0.3	36.7	149.7	68.2	0.5			255.5			
325		0.1						0.1			
330											
340											
355											
SUM	0.3	36.8	149.8	69.8	0.5			257.3			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600, BY OAT	60
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			0.7	0.2				0.9			
325											
330											
340											
355											
SUM			0.7	0.2				0.9			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		1.9	9.4	3.7	0.2			15.2			
325											
330											
340											
355											
SUM		1.9	9.4	3.7	0.2			15.2			
MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		1.4	4.5	3.7	0.3			9.9			
325											
330											
340											
355											
SUM		1.4	4.5	3.7	0.3			9.9			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600,	BY	OAT	90
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295			0.1					0.1					
310		0.3	2.6	1.0				3.9					
325													
330													
340													
355													
SUM		0.3	2.7	1.0				4.0					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										600,	BY	OAT	SUM
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295			0.1					0.1					
310		3.6	17.3	8.5	0.5			29.9					
325													
330													
340													
355													
SUM		3.6	17.4	8.5	0.5			30.0					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900,	BY	OAT	60
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295													
310			0.6	0.3				1.0					
325													
330													
340													
355													
SUM			0.6	0.3				1.0					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900,	BY	OAT	70
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295													
310		1.6	4.2	3.0				8.9					
325													
330													
340													
355													
SUM		1.6	4.2	3.0				8.9					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900,	BY	OAT	80
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295				0.2				0.2					
310		1.1	5.0	5.9				12.0					
325													
330													
340													
355													
SUM		1.1	5.0	6.2				12.2					

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900,	BY	OAT	90
LESS	10	20	30	40	50	60	70	SUM					
LESS													
295													
310		0.1	1.4	1.4				2.8					
325													
330													
340													
355													
SUM		0.1	1.4	1.4				2.8					

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										900, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295				0.2				0.2			
310		2.8	11.3	10.7				24.7			
325											
330											
340											
355											
SUM		2.8	11.3	10.9				24.9			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310			1.2	0.1				1.3			
325											
330											
340											
355											
SUM			1.2	0.1				1.3			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	80
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1		0.5				0.6			
325											
330											
340											
355											
SUM		0.1		0.5				0.6			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1200, BY OAT	SUM
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	1.2	0.6				1.9			
325											
330											
340											
355											
SUM		0.1	1.2	0.6				1.9			

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB										1500, BY OAT	70
LESS	10	20	30	40	50	60	70	SUM			
LESS											
295											
310		0.1	0.1	0.3				0.4			
325											
330											
340											
355											
SUM		0.1	0.1	0.3				0.4			

TABLE XLIII - Continued

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										80
LESS	10	20	30	40	50	60	70	SUM		
295				0.2				0.2		
310										
325										
330										
340										
355										
SUM				0.2				0.2		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. STEADY, BY RATE OF CLIMB 1500, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295										
310		0.1	0.1	0.5				0.6		
325										
330										
340										
355										
SUM		0.1	0.1	0.5				0.6		

MINUTES FOR TORQUE VS RPM BY MISSION SEG. SUM, BY RATE OF CLIMB SUM, BY OAT										SUM
LESS	10	20	30	40	50	60	70	SUM		
295	5.3	0.3	0.5	1.3	0.2			7.7		
310	8.1	5.8	7.7	20.0	33.7	9.9		85.2		
325	24.6	403.3	2933.0	5037.1	1534.9	52.6		9985.4		
330	7.9	28.4	35.9	39.3	5.1			116.6		
340	1.3	1.6	0.4	3.2	0.1			6.6		
355	0.2							0.2		
SUM	47.2	439.4	2977.6	5099.6	1575.2	62.6		10201.6		

TABLE XLIV. CYCLIC STEADY VERSUS CYCLIC PEAKS BY
COLLECTIVE STEADY (MISSION SEGMENT 4),
SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											10
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1	2	1					4
20											
SUM				1	2	1					4
MINS	0.	7.0	6.9	14.6	13.3	4.5	0.	0.	0.	0.	46.3
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											20
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				3	1		1				5
-10											
10				5	3	3					11
20				2	1						3
30											
SUM				10	5	3	1				19
MINS	0.	1.6	42.2	262.6	258.5	177.8	24.1	0.	0.	0.	766.8
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											30
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1					1
-20					1	3	8	3			15
-10											
10				1	4	5	5				15
20						1					1
30											
SUM				1	5	10	13	3			32
MINS	0.	15.5	308.8	831.2	967.0	224.3	77.1	23.0	0.	0.	2446.9
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											40
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20					2	2	7	1			12
-10											
10					1	3	4				8
20											
SUM					3	5	11	1			20
MINS	0.	19.6	330.1	629.7	476.2	62.4	79.1	14.8	0.	0.	1612.0
CYCLIC STEADY VS CYCLIC PEAKS BY COLL. STEADY											50
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					1	1					2
20											
SUM					1	1					2
MINS	0.	1.2	14.4	31.9	12.9	2.9	5.8	0.3	0.	0.	69.4

TABLE XLV. CYCLIC STEADY VERSUS CYCLIC F
ALTITUDE (MISSION SEGMENT 4), S. II

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20						1					1
-10											
10						2	2				4
20											
SUM						3	2				5
MINS	0.	3.0	11.6	1.1	2.1	9.7	2.4	0.5	0.	0.	30.4

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 1000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1					1
-20				3	2	3	9	1			18
-10											
10				1	2	7	3				13
20				1		1					2
30											
SUM				5	4	12	12	1			34
MINS	0.	13.3	121.3	151.1	229.1	99.7	86.8	17.0	0.	0.	718.4

CYCLIC STEADY VS CYCLIC PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20					2	1	7	3			13
-10											
10				6	9	4	4				23
20				1	1						2
30											
SUM				7	12	5	11	3			38
MINS	0.	20.3	551.8	1581.3	1433.7	352.5	97.0	20.6	0.	0.	4057.2

TABLE XLVI. CYCLIC STEADY VERSUS CYCLIC PEAKS BY
AIRSPEED (MISSION SEGMENT 4), SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1					1
-20				3	4	5	16	4			32
-10											
10				1	4	12	9				26
20				1		1					2
30											
SUM				5	8	19	25	4			61
MINS	0.	0.	6.1	20.2	65.0	169.3	174.7	38.1	0.	0.	473.4

TABLE XLVI - Continued

CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1	1	1					3
20					1						1
30											
SUM				1	2	1					4
MINS	0.	0.	0.1	3.6	17.7	60.3	5.3	0.	0.	0.	87.0
CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				2	1						3
20				1							1
30											
SUM				3	1						4
MINS	0.	0.	0.1	20.3	52.1	70.7	4.3	0.	0.	0.	147.6
CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				2	2						4
20											
SUM				2	2						4
MINS	0.	0.	3.1	83.9	133.0	89.0	1.9	0.	0.	0.	310.9
CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 80											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					1						1
20											
SUM					1						1
MINS	0.	6.3	24.9	177.4	385.4	60.1	0.	0.	0.	0.	654.1
CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 100											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					2						2
20											
SUM					2						2
MINS	0.	1.5	131.6	423.9	392.6	5.5	0.	0.	0.	0.	955.0
CYCLIC STEADY VS CYCLIC PEAKS BY VELOCITY 110											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1							1
20											
SUM				1							1
MINS	0.	2.7	162.5	413.9	129.7	0.1	0.	0.	0.	0.	709.2

TABLE XLVII. CYCLIC STEADY VERSUS CYCLIC PEAKS BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE II

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 275											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20					1	1					2
-10											
10					1						1
20											
SUM					2	1					3
MINS	0.	0.	4.0	6.4	11.0	6.9	12.0	5.7	0.	0.	48.8

CYCLIC STEADY VS CYCLIC PEAKS BY RPM 310											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1					1
-20				3	3	4	16	4			30
-10											
10				7	10	13	9				39
20				2	1	1					4
30											
SUM				12	14	19	25	4			74
MINS	0.	44.2	699.3	1755.4	1715.6	459.5	171.7	32.4	0.	0.	4878.3

CYCLIC STEADY VS CYCLIC PEAKS BY RPM SUM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30						1					1
-20				3	4	5	16	4			32
-10											
10				7	11	13	9				40
20				2	1	1					4
30											
SUM				12	16	20	25	4			77
MINS	0.	45.2	704.2	1770.0	1727.8	472.0	186.2	38.1	0.	0.	4943.5

TABLE XLVIII. AIRSPEED ACCELERATION VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT											
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0
LESS						8					
-40					1	89	2				
-30					2	153	1				
-20						51	2				
-10											
10						17					
20						2					
30											
SUM					3	320	5				
											328

TABLE XLVIII - Continued

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS				2		17	4	1	1	2	1	28
-40			1	2	11	205	23	12	3	5	2	264
-30		1	2	2	15	368	34	19	8	1	2	452
-20				1	2	187	22	1				213
-10												
10			1	6	5	47		1				60
20					1	3	1					5
30												
SUM		1	4	13	34	827	84	34	12	8	5	1022

ACCELERATION VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS						4						4
-40						49	1					50
-30					1	115	2					118
-20					1	68						69
-10												
10						81						81
20						3						3
30												
SUM					2	320	3					325

TABLE XLIX. ROTOR RPM VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

RPM VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT								
	LESS	295	310	325	330	340	355	SUM
LESS			6	2				8
-40		2	90					92
-30		2	152	2				156
-20		2	50	1				53
-10								
10		2	15					17
20			2					2
30								
SUM		8	315	5				328
MINS	0.	13.7	921.6	19.6	0.7	0.	0.	955.6

RPM VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR								
	LESS	295	310	325	330	340	355	SUM
LESS		1	27					28
-40	2	7	251	4				264
-30		5	445	2				452
-20	1	1	210		1			213
-10								
10	2	1	53	3	1			60
20	1	1						5
30								
SUM	6	16	989	9	2			1022
MINS	5.3	51.7	5387.3	57.8	1.6	0.2	0.	5503.8

TABLE XLIX - Continued

RPM VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT								
	LESS	295	310	325	330	340	355	SUM
LESS			4					4
-40		1	48	1				50
-30			118					118
-20		2	67					69
-10								
10		8	71	2				81
20		1	2					3
30								
SUM		12	310	3				325
MINS	1.1	10.7	940.9	30.7	1.5	0.	0.	985.0

RPM VS CYCLIC PEAKS BY MISSION SEGMENT STEADY								
	LESS	295	310	325	330	340	355	SUM
-40								
-30			1					1
-20		2	30					32
-10								
10		1	39					40
20			4					4
30								
SUM		3	74					77
MINS	1.3	48.8	4878.2	12.2	2.9	0.	0.	4943.3

TABLE L. AIRSPEED VERSUS CYCLIC PEAKS BY MISSION SEGMENT, SAMPLE II

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS						1	1	3	3							8
-40				1	9	13	32	25	10	2						92
-30	1	3	5	11	28	41	34	21	12							156
-20	6	2	4	4	11	13	6	3	3	1						53
-10																
10	17															17
20	2															2
30																
SUM	26	5	9	16	48	68	73	52	28	3						328
MINS	145.3	74.9	69.9	108.9	145.2	163.0	149.6	73.1	23.9	1.8	0.	0.	0.	0.	0.	955.6

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS		1			1		1	7	7	3	3	2	2			28
-40			1	3	6	16	39	70	67	42	11	6	2			264
-30		8	12	17	40	74	102	86	58	35	13	4	3		1	452
-20	20	19	10	16	41	50	40	10	5	1	1					213
-10																
10	18	25	9	4	2	2										60
20	2	3														5
30																
SUM	40	56	32	40	90	142	182	173	137	81	28	12	7	1	1	1022
MINS	111.8	309.3	354.6	600.1	967.6	1193.0	927.8	608.6	292.7	98.5	26.8	8.6	3.3	0.9	0.6	5504.2

TABLE I. - Continued

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-40	1				2	1	4	13	16	11	1					4
-30	4			3	9	21	22	25	27	3			1			50
-20	15	2	5	2	11	12	12	6	2	2				1		118
-10																69
10	71	10														81
20	3															3
30																
SUM	94	12	5	5	22	34	38	44	45	17	7		2			325
MINS	99.8	111.7	14.2	96.4	130.0	139.4	108.3	97.8	70.3	36.2	8.1	2.0	0.7	0.	0.	985.0

VELOCITY VS CYCLIC PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-40																
-30	1															1
-20	32															32
-10																
10	26	3	3	4	1		2	1								40
20	2	1	1													4
30																
SUM	61	4	4	4	1		2	1								77
MINS	473.4	87.0	147.6	310.9	654.1	1016.6	955.0	709.2	452.3	132.4	5.0	0.	0.	0.	0.	4943.5

TABLE LI. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS
BY CYCLIC STEADY (MISSION SEGMENT 4). SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 20											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10			1		1						2
20											
SUM			1		1						2
MINS	1.9	6.9	42.2	308.8	330.1	14.4	0.	0.	0.	0.	704.2

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 30											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1		1						2
-10											
10				1							1
20											
SUM			1	1	1						3
MINS	0.	14.6	262.6	831.2	629.7	31.9	0.	0.	0.	0.	1771.1

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30			1								1
-20			2	4							6
-10											
SUM			3	4							7
MINS	0.	13.3	208.5	967.0	476.2	12.9	0.	0.	0.	0.	1727.9

TABLE LI - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											50
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1	2							3
-10											
10				1							1
20											
SUM			1	3							4
MINS	0.	4.5	177.8	224.3	62.4	2.9	0.	0.	0.	0.	472.0

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY											60
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1	1						2
-10											
SUM				1	1						2
MINS	0.	0.	24.1	77.1	79.1	5.8	0.	0.	0.	0.	186.2

COLL. STEADY VS COLLECTIVE PEAKS BY CYCLIC STEADY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1							1
-10											
SUM				1							1
MINS	0.	0.	0.	23.0	14.8	0.3	0.	0.	0.	0.	38.1

TABLE LII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY ALTITUDE (MISSION SEGMENT 4). SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 1000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				2	1						3
-10											
10			1	2							3
20											
SUM			1	4	1						6
MINS	1.7	7.9	33.4	399.9	207.1	18.3	0.	0.	0.	0.	718.4

COLL. STEADY VS COLLECTIVE PEAKS BY ALTITUDE 2000											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30			1								1
-20			4	6	1						11
-10											
10					1						1
20											
SUM				6	2						13
MINS	0.3	25.7	678.0	1938.7	1365.0	49.5	0.	0.	0.	0.	4057.2

TABLE LIII. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS
BY AIRSPEED (MISSION SEGMENT 4), SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY LESS											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30			1								1
-20				5	1						6
-10											
10			1	1							2
20											
SUM			2	6	1						9
MINS	0.	6.1	58.9	226.5	166.8	15.1	0.	0.	0.	0.	473.4
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 40											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			2								2
-10											
SUM			2								2
MINS	0.	4.0	57.7	25.4	0.	0.	0.	0.	0.	0.	87.0
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 60											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				2							2
-10											
SUM				2							2
MINS	0.1	3.2	67.0	70.2	7.1	0.	0.	0.	0.	0.	147.6
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 70											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1								1
-10											
SUM			1								1
MINS	0.2	8.2	53.5	188.0	31.1	0.	0.	0.	0.	0.	310.9
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 80											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20				1							1
-10											
SUM				1							1
MINS	1.0	16.5	159.9	368.3	108.0	0.3	0.	0.	0.	0.	654.1
COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 100											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-30											
-20			1		1						2
-10											
SUM			1		1						2
MINS	0.3	1.2	95.7	422.2	429.3	7.0	0.	0.	0.	0.	955.0

TABLE LIII - Continued

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 110											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10				1							1
20											
SUM				1							1
MINS	0.	0.	19.7	316.2	347.3	26.0	0.	0.	0.	0.	709.2

COLL. STEADY VS COLLECTIVE PEAKS BY VELOCITY 120											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-10											
10					1						1
20											
SUM					1						1
MINS	0.	0.	6.7	246.7	181.7	17.2	0.	0.	0.	0.	452.3

TABLE LIV. COLLECTIVE STEADY VERSUS COLLECTIVE PEAKS BY ROTOR RPM (MISSION SEGMENT 4), SAMPLE II

COLL. STEADY VS COLLECTIVE PEAKS BY RPM 310											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30			1								1
-20			4	8	2						14
-10											
10			1	2	1						4
20											
SUM			6	10	3						19
MINS	2.0	46.3	759.2	2421.7	1586.8	62.3	0.	0.	0.	0.	4878.3

COLL. STEADY VS COLLECTIVE PEAKS BY RPM SUM											
	LESS	10	20	30	40	50	60	70	80	90	SUM
-40											
-30			1								1
-20			4	8	2						14
-10											
10			1	2	1						4
20											
SUM			6	10	3						19
MINS	2.0	46.3	766.8	2446.9	1612.0	69.4	0.	0.	0.	0.	4943.4

TABLE LV. AIRSPEED ACCELERATION VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. ASCENT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
-40												
-30					1	1						2
-20					1	31	1					33
-10												
10					1	24	5					30
20												
SUM					3	56	6					65

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. MANUVR												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS				5	1	8						14
-40			3	1	6	37						47
-30				1	29	117	4	5	2		1	159
-20			1	9	46	380	23	7	3			469
-10												
10					4	71	4		1			80
20						1						1
30												
40						2						2
SUM			4	16	86	616	31	12	6		1	772

ACCELERATION VS COLLECTIVE PEAKS BY MISS. SEG. DESCNT												
	LESS	-15.0	-12.0	-9.0	-6.0	-3.0	3.0	6.0	9.0	12.0	15.0	SUM
LESS					4	4						8
-40				1	29	64						94
-30					31	166						197
-20					3	71	1					75
-10												
10						4						4
20												
SUM				1	67	309	1					378

TABLE LVI. ROTOR RPM VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT								
	LESS	295	310	325	330	340	355	SUM
-40								
-30			2					2
-20			33					33
-10								
10		2	28					30
20								
SUM		2	63					65
MINS	0.	13.7	921.6	19.6	0.7	0.	0.	955.6

TABLE LVI - Continued

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR								
	LESS	295	310	325	330	340	355	SUM
LESS	1	4	5	3		1		14
-40	6	4	27	10				47
-30		1	151	7				159
-20			458	11				469
-10								
10	1	15	63	1				80
20			1					1
30								
40	2							2
SUM	10	24	705	32		1		772
MINS	5.3	51.7	5387.3	57.8	1.6	0.2	0.	5503.8

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT								
	LESS	295	310	325	330	340	355	SUM
LESS			6	2				8
-40	1		76	15	2			94
-30		2	168	25	2			197
-20		1	71	3				75
-10								
10		2	2					4
20								
SUM	1	5	323	45	4			378
MINS	1.1	10.7	940.9	30.7	1.5	0.	0.	985.0

RPM VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY								
	LESS	295	310	325	330	340	355	SUM
-40								
-30			1					1
-20			14					14
-10								
10			4					4
20								
SUM			19					19
MINS	1.3	48.8	4878.2	12.2	2.9	0.	0.	4943.3

TABLE LVII. AIRSPEED VERSUS COLLECTIVE PEAKS BY MISSION SEGMENT, SAMPLE II

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-40																
-30			1		1											2
-20	5		2	6	6	7	6	1								33
-10																
10	16	6	2	1	2			1	2							30
20																
SUM	21	6	5	7	9	7	6	2	2							65
MINS	145.3	74.9	69.9	108.9	145.2	163.0	149.6	73.1	23.9	1.8	0.	0.	0.	0.	0.	955.6

TABLE LVII - Continued

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-40	1	8	6	3	7	6	7	1	3							47
-30	5	29	31	29	21	23	12	6	2	1						159
-20	14	56	49	55	104	105	42	26	18							469
-10																
10	5	8	5	8	4	6	12	11	14	7		2				80
20						1										1
30																
40	2															2
SUP	27	101	92	101	137	143	78	46	37	8		2				772
MINS	111.8	309.3	354.6	600.1	967.6	1193.0	927.8	608.6	292.7	98.7	26.8	8.6	3.3	0.9	0.6	5504.2

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-40	0	31	32	11	7	3	1	1								96
-30	11	88	44	20	17	7	4	4	1			1				197
-20	4	14	10	4	8	12	9	6	7		1					75
-10																
10	4															4
20																
SUP	27	135	88	36	34	23	14	11	8		1	1				378
MINS	99.8	111.7	84.2	96.4	130.0	139.4	108.3	97.8	70.3	36.2	8.1	2.0	0.7	0.	0.	985.0

VELOCITY VS COLLECTIVE PEAKS BY MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-40																
-30	1															1
-20	6	2	2	1	1		2									14
-10																
10	2							1	1							4
20																
SUP	9	2	2	1	1		2	1	1							19
MINS	473.4	87.0	147.6	310.9	654.1	1016.6	953.0	709.2	452.3	132.4	5.0	0.	0.	0.	0.	4943.5

TABLE LVIII. GUST n_z PEAKS FOR μ VERSUS n_z BY MISSION SEGMENT, ALTITUDE, AND C_T/σ , SAMPLE II

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 1000, C_T/σ 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
0.8										
0.7						1				1
0.6										
SLP						1				1
TIME	30.8	34.1	32.4	76.5	59.8	5.5	0.	0.	0.	239.1

GUST n_z PEAKS FOR μ VS n_z BY MISSION SEGMENT ASCENT, ALTITUDE 1000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
0.8										
0.7						1				1
0.6										
SLP						1				1
TIME	30.8	34.1	32.4	76.5	59.8	5.5	0.	0.	0.	239.1

TABLE LVIII - Continued

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 2000, CT/S 0.06										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				2	1	1				4
0.8										
0.7					1					1
0.6										
SLM				2	2	1				5
TIME	30.5	27.6	44.0	206.2	331.9	41.7	0.	0.	C.	682.0

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 2000										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				2	1	1				4
0.8										
0.7					1					1
0.6										
SLM				2	2	1				5
TIME	30.5	27.6	44.0	206.2	331.9	41.7	0.	0.	C.	682.0

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				2	1	1				4
0.8										
0.7					2					2
0.6										
SLM				2	3	1				6
TIME	62.3	43.8	80.0	297.5	403.9	48.2	0.	0.	0.	955.6

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 1000, CT/S 0.06										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					3	1				4
0.8										
SLM					3	1				4
TIME	2.5	18.6	117.6	317.8	389.4	41.9	0.7	0.	C.	888.4

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 1000										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					3	1				4
0.8										
SLM					3	1				4
TIME	2.6	18.7	118.2	317.9	389.4	41.9	0.7	0.	C.	889.5

TABLE LVIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000, CT/S 0.06										
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1	1			2
1.2				8	35	19	5			67
0.8										
0.7				1	12	8				21
0.6						1				1
0.5										
SLM				9	47	29	6			91
TIME	1.0	19.3	202.6	1318.6	2352.7	554.3	20.8	0.8	0.	4470.1

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT MANUVR, ALTITUDE 2000										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1	1			2
1.2				8	35	19	5			67
0.8										
0.7				1	12	8				21
0.6						1				1
0.5										
SLM				9	47	29	6			91
TIME	1.0	19.3	202.6	1318.8	2354.1	554.7	20.9	0.8	0.	4472.2

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT MANUVR										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1	1			2
1.2				8	38	20	5			71
0.8										
0.7				1	12	8				21
0.6						1				1
0.5										
SLM				9	50	30	6			95
TIME	3.6	40.2	336.1	1670.7	2808.1	621.9	22.6	0.9	0.	5504.2

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000, CT/S 0.06										
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
SLM					1					1
TIME	7.7	23.2	64.5	91.6	43.0	6.9	0.	0.	0.	236.8

GUST NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT DESCNT, ALTITUDE 1000										
	LESS	C.00	0.05	C.10	0.15	C.20	0.25	0.30	0.35	SUM
1.3										
1.2					1					1
0.8										
SLM					1					1
TIME	7.7	23.2	64.6	91.8	43.0	6.9	0.	0.	0.	237.2

TABLE LVIII - Continued

GUST NZ PEAKS FOR		ML	VS	NZ	BY MISSION SEGMENT DESCNT,					ALTITUDE	2000, CT/S	0.06
LESS		C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3												
1.2			2		1		2			5		
0.8												
0.7					3	4				7		
0.6												
0.5							1			1		
0.4												
SLM			2		4	4	3			13		
TIME	12.0	19.9	66.7	193.3	286.4	129.4	5.8	0.	0.	714.6		

GUST NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT DESCNT,					ALTITUDE	2000	
LESS		C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3												
1.2			2		1		2			5		
0.8												
0.7					3	4				7		
0.6												
0.5							1			1		
0.4												
SLM			2		4	4	3			13		
TIME	12.0	19.9	66.9	193.4	286.8	129.4	5.8	0.	0.	715.2		

GUST NZ PEAKS FOR		ML	VS	NZ	BY MISSION SEGMENT DESCNT							
LESS		C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3												
1.2			2		2		2			6		
0.8												
0.7					3	4				7		
0.6												
0.5							1			1		
0.4												
SLM			2		5	4	3			14		
TIME	22.2	44.2	134.8	290.3	341.2	146.5	5.8	0.	0.	985.0		

GUST NZ PEAKS FOR		ML	VS	NZ	BY MISSION SEGMENT STEADY,					ALTITUDE	1000, CT/S	0.06
LESS		C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3												
1.2				1		2				3		
0.8												
SLM				1		2				3		
TIME	139.2	101.7	7.9	90.2	245.7	133.7	0.	0.	0.	718.4		

GUST NZ PEAKS FOR		MU	VS	NZ	BY MISSION SEGMENT STEADY,					ALTITUDE	1000	
LESS		C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.3												
1.2				1		2				3		
0.8												
SLM				1		2				3		
TIME	139.2	101.7	7.9	90.2	245.7	133.7	0.	0.	0.	718.4		

TABLE LVIII - Continued

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000, CT/S 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					6	13				19
0.8										
0.7					5	5				10
0.6					1					1
0.5										
SUM					12	18				30
TIME	124.2	70.2	77.3	812.3	2270.6	700.2	1.2	0.	0.	4056.0

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2					6	13				19
0.8										
0.7					5	5				10
0.6					1					1
0.5										
SUM					12	18				30
TIME	129.4	70.2	77.3	812.3	2270.6	700.2	1.2	0.	0.	4057.2

GUST NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				1	6	15				22
0.8										
0.7					5	5				10
0.6					1					1
0.5										
SUM				1	12	20				33
TIME	271.6	182.3	86.9	932.2	2606.1	863.3	1.2	0.	0.	4943.5

GUST NZ PEAKS FOR MU VS NZ										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3						1	1			2
1.2			2	11	47	36	7			103
0.8										
0.7				1	22	17				40
0.6					1	1				2
0.5							1			1
0.4										
SUM			2	12	70	55	9			148
TIME	359.7	330.5	637.7	3190.8	6159.2	1679.8	29.6	0.9	0.	12388.2

TABLE LIX. GUST n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE II

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3					1				1							2
1.2																
0.8							2			2						4
0.7																
0.6					1		2		1	2						6
SUM																
TIME	2.2	5.7	8.5	21.4	40.3	40.7	28.5	14.3	15.2	10.7	1.5	0.7	0.	0.1	0.	189.6

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		2														2
0.8									4							4
0.7																
0.6									4							4
SUM																
TIME	5.3	5.4	3.2	4.1	4.2	10.4	5.8	5.2	6.5	2.4	1.4	0.	0.	0.	0.	54.0

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2									1							1
0.8																
0.7									1							1
0.6																
SUM																
TIME	16.0	0.	0.	5.7	13.8	19.7	45.6	29.8	38.8	19.8	0.	0.	0.	0.	0.	189.3

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000, ALTITUDE 2000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		2			1				2							5
0.8																
0.7							2		5	2						9
0.6																
SUM																
TIME	25.7	13.0	12.9	31.9	59.6	72.4	80.1	49.5	60.7	32.8	2.9	0.7	0.	0.1	0.	442.0

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2		2			1				2							5
0.8																
0.7							2		5	2						9
0.6																
SUM																
TIME	32.2	15.8	14.8	34.8	64.1	75.4	83.6	54.1	64.9	37.7	4.1	0.7	0.1	0.1	0.	482.2

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.8																
0.7								1								1
0.6																
SUM																
TIME	25.2	9.9	8.6	9.5	10.2	7.2	8.0	3.6	0.4	0.	0.	0.	0.	0.	0.	82.4

GUST n_z PEAKS FOR VELOCITY VS n_z BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2								1								1
0.8																
SUM																
TIME	45.1	92.7	66.0	84.0	115.2	144.8	73.5	28.0	11.8	4.1	0.7	0.1	0.	0.	0.	666.0

TABLE LIX - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2						1									1	
0.8																
SUM						1									1	
TIME	39.9	41.6	23.9	25.7	22.3	14.6	8.6	7.0	1.9	0.4	0.4	0.	0.	0.	0.	186.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2					1			2							3	
0.8																
SUM					1			2							3	
TIME	149.3	0.8	6.6	13.9	51.4	79.9	35.5	22.5	25.1	17.9	0.7	0.	0.	0.	0.	403.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2					1		1	1	2						5	
0.8																
0.7							1								1	
0.6																
SUM					1		2	1	2						6	
TIME	259.6	145.0	105.2	133.1	199.0	246.4	125.6	61.1	39.3	22.4	1.8	0.1	0.	0.	0.	1338.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2				1				1							2	
0.8																
SUM				1				1							2	
TIME	34.0	22.5	20.8	38.5	55.3	48.9	46.4	22.7	10.3	1.2	0.	0.	0.	0.	0.	300.5

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																
1.3								1		1					2	
1.2			2	1	6	8	8	16	13	3	4		1		62	
0.8																
0.7				1	2	5		1	3						12	
0.6								1							1	
0.5																
SUM			2	2	8	13	8	18	17	3	5		1		77	
TIME	42.6	110.5	179.3	344.0	567.3	705.0	583.4	385.0	183.3	55.1	15.3	5.3	1.5	0.7	0.6	3178.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2							1			1	1				3	
0.8																
0.7						1		2							3	
0.6																
0.5										1					1	
0.4																
SUM						1	1	2		2	1				7	
TIME	40.1	43.0	38.3	47.5	76.2	89.1	69.8	61.7	47.1	26.7	4.0	1.9	0.7	0.	0.	346.0

GLST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT STEADY																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																
1.2							2	9	6	1					18	
0.8																
0.7							1	3	3						7	
0.6						1									1	
0.5																
SUM						1	3	12	9	1					26	
TIME	126.0	46.9	65.7	179.5	345.1	525.4	562.4	436.3	190.7	44.4	3.2	0.	0.	0.	0.	2525.6

TABLE LIX - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4															
1.3								1		1					2
1.2		2	2	6	8	11	23	20	4	5	1	1			85
0.8															
0.7			1	2	6	1	6	6							22
0.6					1		1								2
0.5										1					1
0.4															
SUM		2	3	8	15	12	32	27	4	7	1	1			112
TIME	242.7	222.9	304.1	699.4	1043.9	1368.3	1262.0	905.6	431.4	127.4	22.5	7.2	2.3	0.7	0.6 6551.0

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4															
1.3								1		1					2
1.2		2	2	7	8	12	26	22	4	5	1	1			90
0.8															
0.7			1	2	6	2	6	6							23
0.6					1		1								2
0.5										1					1
0.4															
SUM		2	3	9	15	14	33	29	4	7	1	1			118
TIME	522.8	378.7	420.5	762.0	1284.8	1656.9	1419.8	986.1	489.7	159.4	25.6	7.5	2.5	0.9	0.6 8117.7

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000, MISSION SEGMENT MANUVR															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2					1		2								3
0.8															
SUM					1		2								3
TIME	2.7	11.4	11.6	27.7	53.2	59.3	28.0	19.7	7.6	0.7	0.2	0.1	0.2	0.	0. 222.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 1000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2					1		2								3
0.8															
SUM					1		2								3
TIME	150.1	38.7	36.5	62.9	94.8	114.2	72.5	89.0	51.1	18.1	0.2	0.1	0.2	0.	0. 728.3

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT ASCENT															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2				1			1								2
0.8															
0.7					1										1
0.6															
SUM				1	1		1								3
TIME	32.9	18.9	18.2	37.2	55.1	80.4	80.1	37.8	11.5	0.3	0.	0.	0.	0.	0. 372.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT MANUVR															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3															
1.2				1			2								3
0.8															
0.7					2	1		1	1						5
0.6															
SUM				1	2	1	2	1	1						8
TIME	15.1	74.7	81.0	113.6	172.4	224.1	187.9	138.5	64.1	21.1	8.1	1.9	1.3	0.	0. 1103.9

TABLE LIX - Continued

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.0																
0.7						1		1								2
0.6																
SUM						1		1								2
TIME	65.0	38.6	67.2	87.6	199.7	319.9	249.7	154.0	140.3	24.0	0.3	0.	0.	0.	0.	1342.4

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2					2			3								5
0.8																
0.7						4	1	1	1	1						8
0.6																
SUM					2	4	1	4	1	1						13
TIME	117.7	139.3	176.6	249.0	445.3	642.4	531.3	344.9	226.3	47.8	9.8	2.0	1.3	0.	0.	2933.8

GUST NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2					2	1		5								8
0.8																
0.7						4	1	1	1	1						8
0.6																
SUM					2	5	1	6	1	1						16
TIME	279.4	188.9	221.1	319.4	547.9	779.7	637.4	448.4	284.7	71.8	10.2	2.4	1.5	0.	0.	3788.5

GUST NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3									1		1					2
1.2		2	2	2	10	9	12	31	24	4	5	1	1			103
0.8																
0.7				1	2	10	5	7	12	3						40
0.6						1		1								2
0.5											1					1
0.4																
SUM		2	2	3	12	20	17	39	37	7	7	1	1			148
TIME	830.4	583.0	656.4	1116.3	1896.8	2512.0	2140.7	1488.6	839.3	268.9	39.9	10.7	4.0	0.9	0.	612388.4

TABLE LX. MANEUVER n_z PEAKS FOR μ VERSUS n_z BY MISSION SEGMENT, ALTITUDE, AND C_T/σ , SAMPLE II

MANEUVER NZ PEAKS FOR μ VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE LESS, C_T/σ 0.06										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.3										
1.2				1						1
0.8										
SLP				1						1
TIME	1.0	1.6	1.0	2.0	1.2	0.2	0.	0.	0.	7.0

TABLE LX - Continued

MANEUVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	LESS
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.2										
1.2					1					1
0.8										
SLM					1					1
TIME	1.0	1.6	1.0	2.0	1.2	0.2	0.	0.	0.	7.0

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	1000, CT/S	0.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.8										
1.7						1				1
1.6					2	1				3
1.5										
1.4					2					2
1.3				2	4					6
1.2			4	16	10	3				33
0.8										
0.7					3					3
0.6										
SLM			4	18	21	5				48
TIME	30.8	34.1	32.4	76.5	59.8	5.5	0.	0.	0.	239.1

MANEUVER	NZ PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	1000	
	LESS	C.00	0.05	C.10	0.15	C.20	0.25	0.30	0.35	SUM
1.8										
1.7						1				1
1.6					2	1				3
1.5										
1.4					2					2
1.3				2	4					6
1.2			4	16	10	3				33
0.8										
0.7					3					3
0.6										
SLM			4	18	21	5				48
TIME	30.8	34.1	32.4	76.5	59.8	5.5	0.	0.	0.	239.1

MANEUVER	NZ PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	ASCENT,	ALTITUDE	2000, CT/S	0.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.5										
1.4				3						3
1.3			1	6	1	2				10
1.2				28	30	7				65
0.8										
0.7				6	3					9
0.6										
0.5										
0.4					2					2
0.2										
SLM			1	43	36	9				89
TIME	30.5	27.6	44.0	206.2	331.7	41.7	0.	0.	0.	682.0

TABLE LX - Continued

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 2000										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.5										
1.4				3						3
1.3			1	5	1	2				10
1.2			2	30	7					55
0.9										
0.7				6	3					9
0.6										
0.5					2					2
0.4										
0.2										
SLP			1	42	36	7				99
TIME	30.5	27.6	44.0	206.2	331.9	41.7	0.	0.	0.	682.0
MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 5000, CT/S 0.06										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2				1						1
0.8										
SLP				1						1
TIME	0.	0.3	2.3	10.1	10.6	0.7	0.	0.	0.	24.0
MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 5000, CT/S 0.09										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2				1						1
0.8										
SLP				1						1
TIME	0.	0.2	0.3	2.7	0.3	0.	0.	0.	0.	3.5
MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT ASCENT, ALTITUDE 5000										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.3										
1.2				1	1					2
0.8										
SLP				1	1					2
TIME	0.	0.5	2.6	12.3	10.9	0.7	0.	0.	0.	27.5
MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT ASCENT										
LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.8										
1.7					1					1
1.6				2	1					3
1.5										
1.4			3	2						5
1.3		1	8	5	2					16
1.2		4	46	41	10					101
0.8										
0.7			5	6						12
0.6										
0.5										
0.4				2						2
0.2										
SLP		5	63	58	14					140
TIME	62.3	63.8	80.0	297.5	403.9	48.2	0.	0.	0.	955.6

TABLE LX - Continued

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	LESS, CT/S	0.06
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.6											
1.5				1		1				2	
1.4											
1.3					2					2	
1.2				1	4	1				6	
0.8											
SLM				2	6	2				10	
TIME	C.	C.	C.1	1.4	5.7	0.8	0.	0.	0.	7.9	

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	LESS	
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.6											
1.5				1		1				2	
1.4											
1.3					2					2	
1.2				1	4	1				6	
0.8											
SLM				2	6	2				10	

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	1000, CT/S	0.06
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
2.4											
2.2					2					2	
2.0										5	
1.8			2	2	5	7	1			17	
1.7			2	9	4	2	1			18	
1.6				8	7	2	1			18	
1.5			2	17	13	5				37	
1.4		1	11	26	37	10				85	
1.3		1	22	54	74	11				162	
1.2		3	49	141	221	15	1			430	
0.8											
0.7			1	7	8	3				19	
0.6				2	2					4	
0.5					3					3	
0.4											
SLM		5	89	268	377	57	4			800	
TIME	2.5	18.6	117.6	317.9	389.4	41.9	0.7	0.	C.	888.4	

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	1000	
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
2.4											
2.2					2					2	
2.0				2	3					5	
1.8			2	2	5	7	1			17	
1.7			2	9	4	2	1			18	
1.6				8	7	2	1			18	
1.5			2	17	13	5				37	
1.4		1	11	26	37	10				85	
1.3		1	22	54	74	11				162	
1.2		3	49	141	221	15	1			430	
0.8											
0.7			1	7	8	3				19	
0.6				2	2					4	
0.5					3					3	
0.4											
SLM		5	89	268	377	57	4			800	
TIME	2.6	18.7	118.2	317.9	389.4	41.9	0.7	0.	C.	889.5	

TABLE LX - Continued

MANEUVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.06
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4						2				2	
2.2					2	2	2			6	
2.0				3	5	8	7			18	
1.8			1	10	20	42	9			81	
1.7			1	17	27	41	7			93	
1.6			1	32	52	43	4	1		133	
1.5			4	64	103	64	6	1		242	
1.4			11	115	201	72	5			404	
1.3		2	22	211	489	119	9			852	
1.2		1	48	406	1118	232	10	1		1816	
0.6											
0.7		4	28	93	81	44				240	
0.6	2	1	6	21	35	3		1		69	
0.5	1	2		10	4	2				19	
0.4			1	3	3					7	
0.2			2		3					5	
LESS											
SLP	3	10	125	975	2143	674	53	4		3987	
TIME	1.0	19.3	202.6	1318.6	2352.7	554.3	20.8	0.8	C.	4470.1	

MANEUVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000, CT/S	0.09
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.4										1	
1.3						1				1	
1.2				1	1		1			3	
0.8											
0.7					2		1			3	
0.6											
SLP				1	3	1	2			7	
TIME	C.	C.1	C.	0.2	1.4	0.4	0.1	0.	C.	2.1	

MANEUVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	2000	
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4						2				2	
2.2					2	2	2			6	
2.0				3	5	8	2			18	
1.8			1	10	20	42	8			81	
1.7			1	17	27	41	7			93	
1.6			1	32	52	43	4	1		133	
1.5			4	64	103	64	6	1		242	
1.4			11	115	201	72	5			404	
1.3		2	22	211	489	120	9			853	
1.2		1	48	407	1119	232	11	1		1919	
0.8											
0.7		4	28	93	83	44	1			243	
0.6	2	1	6	21	35	3		1		69	
0.5	1	2		10	4	2				19	
0.4			1	3	3					7	
0.2			2		3					5	
LESS											
SLP	3	10	125	976	2146	675	55	4		3994	
TIME	1.0	19.3	202.5	1318.8	2354.1	554.7	20.9	0.8	C.	4472.2	

TABLE LX - Continued

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	5000, CT/S	0.06
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4										
2.2				2		1			3	
2.0			1		3				4	
1.8				1	4				5	
1.7				2					2	
1.6					1				1	
1.5				2	2				4	
1.4				6	1				7	
1.3			5	10	5		1		21	
1.2		1	5	14	3				23	
0.8										
0.7		2	11	1					14	
0.6			1	2					3	
0.5			2	5	1				8	
0.4			1	4					5	
0.2		1							1	
LESS										
SLM		4	26	49	20	1	1		101	
TIME	C.	2.2	13.9	29.4	36.2	15.3	1.0	0.1	C.	98.0

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	5000, CT/S	0.09
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.4										
1.3					1				1	
1.2				1					1	
0.8										
0.7				2					2	
0.6										
SLM				3	1				4	
TIME	C.	C.	1.3	3.3	22.7	9.2	0.	0.	C.	36.5

MANEUVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR,	ALTITUDE	5000	
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
2.4										
2.2				2		1			3	
2.0			1		3				4	
1.8				1	4				5	
1.7				2					2	
1.6					1				1	
1.5				2	2				4	
1.4				6	1				7	
1.3			5	10	6		1		22	
1.2		1	5	15	3				24	
0.8										
0.7		2	11	3					16	
0.6			1	2					3	
0.5			2	5	1				8	
0.4			1	4					5	
0.2		1							1	
LESS										
SLM		4	26	52	21	1	1		105	
TIME	C.	2.2	15.2	32.7	58.7	24.5	1.0	0.1	C.	134.5

TABLE LX - Continued

PANELVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	MANUVR			
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM
2.4						2				2
2.2					4	4	3			11
2.0				6	8	11	2			27
1.8			3	12	26	53	9			103
1.7			3	26	33	43	8			113
1.6			1	40	59	46	5	1		152
1.5			6	82	118	72	6	1		285
1.4		1	22	141	244	83	5			496
1.3		3	44	270	575	137	9	1		1039
1.2		4	98	554	1359	251	12	1		2279
0.8										
0.7		4	31	101	94	47	1			278
0.6	2	1	6	24	39	3		1		76
0.5	1	2		12	12	3				30
0.4			1	4	7					12
0.2			3		3					6
LESS										
SLM	3	15	218	1272	2581	755	60	5		4909
TIME	3.6	40.2	236.1	1670.7	2808.1	621.9	22.6	0.9	0.	5504.2

PANELVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	1000,	CT/S	0.06
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.6											
1.5				2						2	
1.4			1	3	1	1				6	
1.3			2	1	1	1				5	
1.2			2	22	14					38	
0.8											
0.7				1						1	
0.6											
SLM			5	29	16	2				52	
TIME	7.7	23.2	64.5	91.6	43.0	6.9	0.	0.	0.	236.8	

PANELVER	NZ PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	1000	
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM
1.6										
1.5				2						2
1.4			1	3	1	1				6
1.3			2	1	1	1				5
1.2			2	22	14					38
0.8										
0.7				1						1
0.6										
SLM			5	29	16	2				52
TIME	7.7	23.2	64.6	91.8	43.0	6.9	0.	0.	0.	237.2

TABLE LX - Continued

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000, CT/S	0.06
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.8											
1.7						1				1	
1.6				2		1				3	
1.5				2	2	2				6	
1.4				1	5	1				7	
1.3			1	11	13	4	1			30	
1.2		1	11	37	41	19	6			115	
0.8											
0.7				4	10	5	2			21	
0.6					1					1	
0.5											
SLP		1	12	57	72	33	9			184	
TIME	13.0	19.9	66.7	193.3	286.4	129.4	5.8	0.	0.	714.6	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	2000
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM
1.8						1				1
1.7						1				3
1.6				2		1				6
1.5				2	2	2				7
1.4				1	5	1				30
1.3			1	11	13	4	1			115
1.2		1	11	37	41	19	6			21
0.8										1
0.7				4	10	5	2			184
0.6					1					
0.5										
SLP		1	12	57	72	33	9			715.2
TIME	13.0	19.9	66.9	193.4	286.8	129.4	5.8	0.	0.	

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.06
	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM	
1.4											
1.3					1					1	
1.2											
SLP					1					1	
TIME	C.	C.	0.5	2.6	9.2	8.4	0.	0.	0.	20.7	

PANELVER	NZ	PEAKS FOR	ML	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000, CT/S	0.09
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM	
0.8					1					1	
0.7											
0.6					1					1	
SLP					1						
TIME	C.	C.	C.	0.1	1.2	1.4	0.	0.	0.	2.8	

PANELVER	NZ	PEAKS FOR	MU	VS	NZ	BY MISSION	SEGMENT	DESCNT,	ALTITUDE	5000
	LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM
1.4										
1.3					1					1
1.2										
0.8					1					1
0.7										
0.6					1	1				2
SLP					1					
TIME	C.	C.	0.5	2.7	10.5	9.9	0.	0.	0.	23.5

TABLE LX - Continued

MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT DESCNT

	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.8										
1.7						1				1
1.6				2		1				3
1.5				4	2	2				8
1.4			1	4	6	2				13
1.3			3	12	15	5	1			36
1.2		1	13	59	55	19	6			153
0.8										
0.7				6	10	5	2			23
0.6					1					1
0.5										
SLM		1	17	87	89	35	9			238
TIME	22.2	44.2	134.8	290.3	341.2	146.5	5.8	0.	0.	985.0

MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 1000, CT/S 0.06

	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.5										
1.4						1				1
1.3					1	1				2
1.2	1	1		7	10	11				30
0.8										
0.7						2				2
0.6										
SLM	1	1		7	11	15				35
TIME	139.2	101.7	7.9	90.2	245.7	133.7	0.	0.	0.	718.4

MANEUVER NZ PEAKS FOR MU VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 1000

	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.5										
1.4						1				1
1.3					1	1				2
1.2	1	1		7	10	11				30
0.8										
0.7						2				2
0.6										
SLM	1	1		7	11	15				35
TIME	139.2	101.7	7.9	90.2	245.7	133.7	0.	0.	0.	718.4

MANEUVER NZ PEAKS FOR ML VS NZ BY MISSION SEGMENT STEADY, ALTITUDE 2000, CT/S 0.06

	LESS	C.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
1.5										
1.4			1	2	3	1				7
1.3				10	10	4				24
1.2			4	34	178	52				268
0.8										
0.7					17	4				21
0.6						1				1
0.5										
SLM			5	46	208	62				321
TIME	124.2	70.2	77.3	812.3	2270.6	700.2	1.2	0.	0.	4056.0

TABLE LX - Continued

MANEUVER NZ PEAKS FOR		ML	VS	NZ BY MISSION SEGMENT STEADY,						ALTITUDE	2000
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.5											
1.4			1	2	3	1					7
1.3				10	10	4					24
1.2			4	34	178	52					268
0.8											
0.7					17	4					21
0.6						1					1
0.5											
SLM			5	46	208	62					321
TIME	125.4	70.2	77.3	812.3	2270.6	700.2	1.2	0.	0.		4057.2

MANEUVER NZ PEAKS FOR		MU	VS	NZ BY MISSION SEGMENT STEADY,						ALTITUDE	5000, CT/S	0.06
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM			
1.4												
1.3						1						1
1.2				5	1	2						8
0.8												
0.7					6							6
0.6												
SLM				5	7	3						15
TIME	2.2	1.4	0.7	29.6	78.7	13.0	0.	0.	0.			125.7

MANEUVER NZ PEAKS FOR		ML	VS	NZ BY MISSION SEGMENT STEADY,						ALTITUDE	5000
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.4											
1.3						1					1
1.2				5	1	2					8
0.8											
0.7					6						6
0.6											
SLM				5	7	3					15
TIME	2.2	1.4	0.7	29.6	89.8	13.6	0.	0.	0.		137.5

MANEUVER NZ PEAKS FOR		ML	VS	NZ BY MISSION SEGMENT STEADY							
LESS	C.00	0.05	C.10	0.15	0.20	0.25	0.30	0.35	SUM		
1.5											
1.4			1	2	3	2					8
1.3				10	11	6					27
1.2	1	1	4	46	189	65					306
0.8											
0.7					23	6					29
0.6						1					1
0.5											
SLM	1	1	5	58	226	90					371
TIME	271.6	182.3	86.9	932.2	2606.1	863.3	1.2	0.	0.		4943.5

TABLE LX - Continued

MANEUVER NZ PEAKS FOR ML VS NZ										
	LESS	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	SUM
2.4						2				2
2.2					4	4	3			11
2.0				6	8	11	2			27
1.8			3	12	26	53	9			103
1.7			3	26	33	45	8			115
1.6			1	42	61	48	5	1		158
1.5			6	86	120	74	6	1		293
1.4		1	24	150	255	87	5			522
1.3		3	48	300	606	150	10	1		1118
1.2	1	6	119	705	1644	345	18	1		2839
0.8										
0.7		4	31	113	133	58	3			342
0.6	2	1	6	24	40	4		1		78
0.5	1	2		12	12	3				30
0.4			1	4	9					14
0.2			3		3					6
LESS										
SUM	4	17	245	1480	2954	884	69	5		5658
TIME	356.7	330.5	637.7	3190.8	6159.2	1679.8	29.6	0.9	C.	12388.2

TABLE LXI. MANEUVER n_z PEAKS FOR AIRSPEED VERSUS n_z BY WEIGHT, ALTITUDE, AND MISSION SEGMENT, SAMPLE II

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.0																
1.8								1								1
1.7																
1.6																
1.5						1										1
1.4																
1.3																
1.2																
0.8																
0.7		1														1
0.6																
SUM		1				1		1								3
TIME	5.0	0.1	0.0	0.0	0.0	0.6	0.2	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	1.2
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3									1							1
1.2					2			1								3
0.8																
SUM					2			1	1							4
TIME	1.5	1.9	0.7	1.4	1.6	0.4	0.5	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	9.1
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 1000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.0																
1.8								1								1
1.7																
1.6																
1.5						1										1
1.4																
1.3									1							1
1.2					2			1								3
0.8																
0.7		1														1
0.6																
SUM		1			2	1		2	1							7
TIME	5.5	2.2	1.7	1.4	1.6	1.0	0.6	0.6	1.6	0.5	0.6	0.0	0.1	0.0	0.0	17.6

TABLE LXI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		7000,	ALTITUDE	2000, MISSION SEGMENT ASCENT							
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																	
1.2					1											1	
0.9																	
0.7				1												1	
0.6																	
SUM				1	1											2	
TIME	2.2	1.8	1.1	0.6	1.3	1.5	0.2	0.2	0.1	0.	0.	0.	0.	0.	0.	9.1	

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		7000,	ALTITUDE		2000, MISSION		SEGMENT MANUVR			
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.2																
2.0							1									1
1.8							2	2	2	3	2	1		1		13
1.7									2			1				3
1.6				2	2	1	1	1	1	2						10
1.5			1	4	5	5	3		6	2						26
1.4			1	8	3	4	2	5	5							28
1.3		1		1	7	11	10	3	4	2						39
1.2		1	4	7	11	14	18	3	6	5		3				72
0.8																
0.7			1	1	3	2	2	2	3	3						17
0.6			1			4										5
0.5			1					1								2
0.4																
SUM		2	9	23	31	41	39	17	29	17	2	5		1		216
TIME	2.2	5.7	8.5	21.4	40.3	40.7	28.5	14.3	15.2	10.7	1.5	0.7	0.	0.1	0.	189.6

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		7000,	ALTITUDE		2000, MISSION SEGMENT DESCNT						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6																	
1.5										2						2	
1.4																	
1.3		1			2	1	2	3	1							3	
1.2			2	2	3											14	
0.8																	
SUM		1	2	2	5	1	2	3	1	2						19	
TIME	5.3	5.4	3.2	4.1	4.2	10.4	5.8	5.2	6.5	2.4	1.4	0.	0.	0.	0.	54.0	

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		7000,	ALTITUDE	2000, MISSION SEGMENT STEADY						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5																
1.4									1							1
1.3									1							1
1.2					4	2	9	3	1							19
0.8																
0.7																
0.6								1								1
0.5																
SUM					4	2	9	4	3							22
TIME	16.0	0.	0.	5.7	13.8	19.7	45.6	29.8	38.8	19.8	0.	0.	0.	0.	0.	189.3

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		7000,	ALTITUDE		2000					
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.2																
2.0							1									1
1.8							2	2	2	3	2	1		1		13
1.7									2			1				3
1.6				2	2	1	1	1	1	2						10
1.5			1	4	5	5	3		6	4						28
1.4			1	8	3	4	2	5	6							29
1.3		2		1	9	11	10	3	5	2						43
1.2		1	6	9	19	17	29	9	8	5		3				106
0.8																
0.7			1	2	3	2	2	2	3	3						18
0.6			1			4		1								6
0.5			1					1								2
0.4																
SUM		3	11	26	41	44	50	24	33	19	2	5		1		259
TIME	25.7	13.0	12.9	31.5	59.6	72.4	80.1	49.5	60.7	32.8	2.9	0.7	0.	0.1	0.	442.0

TABLE LXI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6					1										1	
1.5																
1.4																
1.3					1				1						2	
1.2									1						1	
0.8																
SUM					2				2						4	
TIME	0.	0.2	0.	0.5	1.7	1.5	2.5	4.0	2.5	4.4	0.7	0.	0.	0.	0.	18.0
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000, ALTITUDE 5000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6					1										1	
1.5																
1.4																
1.3					1				1						2	
1.2									1						1	
0.8																
SUM					2				2						4	
TIME	1.0	0.7	0.2	1.6	2.9	2.0	2.8	4.0	2.5	4.4	0.7	0.	0.	0.	0.	22.7
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 7000																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																
2.0							1								1	
1.8							2	3	2	3	2	1		1	14	
1.7								2				1			3	
1.6				2	2	1	1	1	1	2					10	
1.5			1	4	5	7	3		6	4					30	
1.4			1	8	3	4	2	5	6						29	
1.3		2	1	1	9	12	10	3	6	3					46	
1.2		1	6	7	21	17	29	10	8	6		3			110	
0.8																
0.7		1	1	2	3	2	2	2	3	3					19	
0.6			1			4		1							6	
0.5			1					1							2	
0.4																
SUM		4	11	22	43	47	50	26	34	21	2	5		1	270	
TIME	32	15.8	14.8	34.4	64.1	75.4	83.6	54.1	64.9	37.7	4.1	0.7	0.1	0.1	0.	482.2
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS, MISSION SEGMENT ASCENT																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.2																
1.2			1												1	
0.8																
SUM			1												1	
TIME	1.2	0.7	0.6	0.	0.	0.6	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.1
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS, MISSION SEGMENT MANUVR																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6																
1.5				1				1							2	
1.4																
1.3																
1.2				1											1	
0.8																
SUM				2				1							3	
TIME	0.	0.1	0.0	0.1	1.0	0.1	0.5	0.3	0.	0.	0.	0.	0.	0.	0.	2.2
MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE LESS																
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.6																
1.5				1				1							2	
1.4																
1.3																
1.2			1	1											2	
0.8																
SUM			1	2				1							4	
TIME	15.6	2.7	2.2	0.8	1.2	0.8	1.0	2.3	8.3	1.5	0.2	0.	0.	0.	0.	36.6

TABLE LXI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.7								1								1
1.6																
1.5																
1.4				1	1		2									4
1.3		1	1			4	4	1								11
1.2																
0.8						1	1									2
0.7																
0.6																
SUM		1	1	1	1	5	7	2								18
TIME	25.2	9.9	8.6	9.5	10.2	7.2	8.0	3.6	0.4	0.	0.	0.	0.	0.	0.	82.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4								2								2
2.2					2	2										4
2.0					3	1	2	2	3	1		1				15
1.8		2			6	2	1	1		1	2					18
1.7		2	3		4	2	1	5		1						16
1.6				3	5	3	3	3	3							26
1.5		2	4	3	5	3	3	3	3							66
1.4	2	11	7	4	10	12	8	7	4		1					123
1.3	4	19	11	15	19	27	15	9	4							321
1.2	10	45	26	29	68	87	41	10	1	2	2					
0.8																
0.7			2		3	2		2		1						10
0.6				2			2									4
0.5							3									3
0.4																
SUM	16	81	53	56	120	138	76	41	15	6	5	1				608
TIME	45.1	92.7	56.0	84.0	115.2	144.8	73.5	28.0	11.8	4.1	0.7	0.1	0.	0.	0.	666.0

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.6																
1.5				1	1											2
1.4		1	1	1	1	1		1								6
1.3		1			1											2
1.2		1	5	5	11	3	4									29
0.8																
0.7					1											1
0.6																
SUM		3	6	7	15	4	4	1								40
TIME	39.9	41.6	23.9	25.7	22.3	14.6	8.6	7.0	1.9	1.4	0.4	0.	0.	0.	0.	186.3

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000, MISSION SEGMENT STEADY																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5								1								1
1.4								1	1							2
1.3																
1.2	2			1	4	3	3	5	3	1						22
0.8																
0.7									1							1
0.6																
SUM	2			1	4	3	3	7	5	1						26
TIME	149.3	0.8	6.6	13.9	51.4	79.9	35.5	22.5	25.1	17.9	0.7	0.	0.	0.	0.	403.7

TABLE LXI - Continued

MANEUVER VZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 1000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4																2
2.2								2								4
2.0					2	2										4
1.8		2			3	1	2	2	3	1		1				15
1.7		2	3		6	2	1	1	1	1	2					16
1.6					4	2	1	6		1						17
1.5		2	4	4	6	3	3	3	3							28
1.4	2	12	8	5	11	13	8	9	4		1					73
1.3	4	20	11	16	21	27	17	10	5							131
1.2	12	47	32	35	83	97	52	16	4	3	2					383
0.8																
0.7			2		4	3	1	2	1	1						14
0.6				2			2									4
0.5							3									3
0.4																
SUM	18	85	60	65	140	150	90	51	20	7	5	1				692
TIME	259.6	145.0	105.2	133.1	199.0	246.4	125.6	61.1	39.3	22.4	1.8	0.1	0.	0.	0.	1338.4

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT ASCENT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5																3
1.4			1		2											5
1.3		1		2		1			1							5
1.2		2	2	8	7	7	2	3								31
0.8																
0.7				1			1									2
0.6																
0.5																
0.4							2									2
0.2																
SUM		3	3	11	9	8	5	3	1							43
TIME	34.0	22.5	20.9	38.5	55.3	48.9	46.4	22.7	10.3	1.2	0.	0.	0.	0.	0.	300.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4						1	1			1						1
2.2											2	1				5
2.0				1	2	1		4	1	1		1				11
1.8		2	4	3	3	3	2	8	12	11	5	3	1			57
1.7			2	6	12	7	9	10	10	12	9	3	1			81
1.6		1	5	6	15	18	18	13	8	12	6	1	1			105
1.5		2	7	12	33	29	29	23	25	11	5	1	1		1	179
1.4	1	11	10	28	46	60	50	45	24	13		1	1			290
1.3	4	16	38	53	100	163	122	84	41	9	10	3	1			544
1.2	8	28	42	93	233	346	282	196	86	23	6	3	1	1		1348
0.8																
0.7	5	24	17	15	31	16	20	24	15	5	1					173
0.6	5	6	6	4	9	6	9	5	1	1					1	53
0.5	2		1	3	2		2	1	1							12
0.4		1	2		1	2										6
0.2		2			1	1	1									5
LESS																
SUM	25	93	134	224	488	653	545	413	224	99	44	17	7	2	2	2970
TIME	42.6	110.5	179.3	344.0	567.3	705.0	583.4	385.0	183.3	55.1	15.3	5.3	1.5	0.7	0.6	3178.8

MANEUVER VZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.7																
1.6				2						1						3
1.5			1	1				1								3
1.4					1	2	2	1	1							7
1.3		2	1	1	2	2	4	6	2		1	1				22
1.2	2	9	7	10	12	11	18	9	3	7		4	1			88
0.8																
0.7				1	1	1	2	7	2		1					15
0.6								1								1
0.4																
SUM	2	11	4	15	16	16	26	25	8	8	2	5	1			139
TIME	40.1	43.0	38.3	47.5	76.2	89.1	69.8	61.7	47.1	26.7	4.0	1.9	0.7	0.	0.	546.0

TABLE LXI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000, MISSION SEGMENT STEADY															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.5																
1.4		1	1	1			1	2								6
1.3				5	3	3	1	5	1							18
1.2	1	3	2	9	23	37	56	43	15	3						192
0.8																
0.7						3	9	5	2							19
0.6																
SUM	1	4	3	15	26	43	67	55	18	3						235
TIME	126.0	46.9	65.7	179.5	345.1	525.4	562.4	436.3	190.7	44.4	3.2	0.	0.	0.	0.	2525.6

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 2000															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4										1						1
2.2						1	1				2	1				5
2.0				1	2	1		4	1	1		1				11
1.8		2	4	3	3	3	2	8	12	11	5	3		1		57
1.7			2	6	12	7	9	10	10	12	9	3		1		81
1.6		1	5	8	15	18	18	13	8	13	6	1		1		108
1.5		2	8	13	33	29	29	24	25	11	5	1		1		182
1.4	1	12	12	29	49	62	53	48	25	13		1			1	306
1.3	4	19	39	61	105	169	127	95	45	9	11	4		1		689
1.2	11	42	48	120	275	401	358	251	104	33	6	7		2	1	1659
0.8																
0.7	5	24	17	17	32	20	32	36	19	5	2					209
0.6	5	6	6	4	9	6	9	6	1	1					1	54
0.5	2		1	3	2		2	1	1							12
0.4		1	2		1	2	2									8
0.2		2			1	1	1									5
LESS																
SUM	28	111	144	265	539	720	643	496	251	110	46	22	8	2	2	3387
TIME	242.7	222.9	304.1	609.4	1043.9	1368.3	1262.0	905.6	431.4	127.4	22.5	7.2	2.3	0.7	0.6	6551.0

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT ASCENT															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3																
1.2						1										1
0.8																
SUM						1										1
TIME	0.	1.0	2.1	1.2	4.8	4.3	1.2	0.3	0.4	0.	0.	0.	0.	0.	0.	15.4

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT MANUVR																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.0																	
1.8						1										1	
1.7																	
1.6									1							1	
1.5																	
1.4					1	1	1	1		1						5	
1.3				1		1	1	3	1					1		8	
1.2		1	1			3	2	2		1						10	
0.8																	
0.7		2			4											6	
0.6								1								1	
0.5						1				1						2	
0.4							2									2	
0.2																	
SUM		3	1	1	5	7	6	7	2	3				1		36	
TIME	2.3	6.3	2.3	4.5	11.8	5.9	10.6	8.3	1.5	0.3	0.2	0.3	0.2	0.2	0.	54.7	

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT DESCNT																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																	
1.3								1								1	
1.2																	
0.8																	
0.7				1												1	
0.6																	
SUM				1				1								2	
TIME	0.	0.	0.	0.3	1.2	3.4	2.8	4.7	2.7	3.7	0.9	0.	0.	0.	0.	19.8	

TABLE LXI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS										NZ BY WEIGHT 8000, ALTITUDE 5000, MISSION SEGMENT STEADY					SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
1.4								1								1
1.3								2								2
1.2				2	4											6
0.8						2	2									4
0.7																
0.6																
SUM				2	6	2		3								13
TIME	2.7	0.7	4.5	12.7	22.8	27.8	16.5	3.9	6.1	4.1	0.	0.	0.	0.	0.	101.8

	MANEUVER NZ PEAKS FOR VELOCITY VS										NZ BY WEIGHT 8000, ALTITUDE 5000					SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
2.0																
1.8								1								1
1.7																
1.6									1							1
1.5																
1.4					1	1	1	1		1						5
1.3				1	1	1	1	5	1					1		10
1.2		1	1	2	4	4	2	4		1						19
0.8																
0.7		2		1	6	2										11
0.6								1								1
0.5						1				1						2
0.4							2									2
0.2																
SUM		3	1	4	11	10	6	11	2	3				1		52
TIME	5.0	8.0	9.0	18.8	40.7	41.4	31.2	17.1	10.8	8.1	1.1	0.3	0.2	0.2	0.	191.7

	MANEUVER NZ PEAKS FOR VELOCITY VS										NZ BY WEIGHT 8000					SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
2.4										1						1
2.2						1	1	2			2	1				7
2.0				1	4	3		4	1	1		1				15
1.8		4	4	3	6	5	4	10	15	12	5	4	1			73
1.7		2	5	6	18	9	10	11	10	13	11	3	1			99
1.6		1	5	11	19	20	19	19	9	14	6	1	1	1		126
1.5		4	12	18	39	32	32	28	28	11	5	1	1		1	212
1.4	3	24	20	34	61	76	62	58	29	14	1	1	1			384
1.3	8	39	50	78	126	197	145	110	51	9	11	4	1	1		830
1.2	23	90	82	158	242	302	412	271	108	37	8	7	2	1		2063
0.8																
0.7	5	26	19	18	42	25	33	38	20	6	2					234
0.6	5	6	6	6	9	6	11	7	1	1					1	59
0.5	2		1	3	2	1	5	1	1	1						17
0.4		1	2		1	2	4									10
0.2		2			1	1	1									5
LESS																
SUM	46	199	206	336	690	880	739	559	273	120	51	23	8	3	2	4135
TIME	522.8	378.7	420.5	762.0	1284.8	1656.9	1419.8	986.1	489.7	159.4	25.6	7.5	2.5	0.9	0.6	8117.7

	MANEUVER NZ PEAKS FOR VELOCITY VS										NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT MANUVR					SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
1.4								1	1							2
1.3								3	2							5
1.2																
0.8								4	3							7
SUM																
TIME	0.	0.	0.	0.	0.5	0.4	2.7	2.0	0.1	0.	0.	0.	0.	0.	0.	5.8

	MANEUVER NZ PEAKS FOR VELOCITY VS										NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT MANUVR					SUM
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	
1.4								1	1							2
1.3								3	2							5
1.2																
0.8								4	3							7
SUM																
TIME	5.2	0.8	0.2	0.3	0.9	0.6	3.0	2.3	0.8	3.8	0.	0.	0.	0.	0.	17.8

TABLE LXI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS								1000, MISSION SEGMENT ASCENT								
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.8																	
1.7									1							1	
1.6								2								2	
1.5																	
1.4					1		1									2	
1.3						1		1								2	
1.2	1	5		6	7	1			1	1						22	
0.8																	
0.7						1										1	
0.6																	
SUM	1	5		6	8	3	1	3	2	1						30	
TIME	47.5	17.2	15.3	18.6	16.4	18.5	12.1	8.2	1.1	0.3	0.	0.	0.	0.	0.	155.3	

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		9000,	ALTITUDE		1000, MISSION SEGMENT		MANUVR			
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.2																
2.0								1								1
1.8									1							1
1.7																
1.6												1				2
1.5				2	5	1	1		1							10
1.4		2	1	1	4	4	2	4		1						19
1.3	1		1	7	7	7	7	5	4							39
1.2	1	2	6	6	23	36	17	12	5	1						109
0.8																
0.7				2		1	2	2								8
0.6																
SUM	2	4	12	20	35	49	29	24	11	2	1					189
TIME	2.7	11.4	11.6	27.7	53.2	59.3	28.0	19.7	7.6	0.7	0.2	0.1	0.2	0.	0.	222.3

	MANEUVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		9000,	ALTITUDE		1000, MISSION SEGMENT DESCNT					
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3		1				1										2
1.2	1	1	1	1		1		1								6
0.8																
SUP	1	2	1	1		2		1								8
TIME	5.1	10.1	6.1	5.1	4.9	3.1	2.3	3.8	0.6	0.7	0.	0.	0.	0.	0.	41.8

	MANEUVER NZ PEAKS FOR VELOCITY VS						NZ BY WEIGHT		9000, ALTITUDE		1000, MISSION SEGMENT STEADY						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.3																	
1.2				1	1	1		2	3							8	
0.8																	
0.7									1							1	
0.6																	
SUM				1	1	1		2	4							9	
TIME	94.9	0.	3.5	11.5	20.3	33.4	30.1	57.2	41.8	16.4	0.	0.	0.	0.	0.	309.0	

	MANEUVER NZ PEAKS FOR VELOCITY VS										1000						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.2																	
2.0								1								1	
1.8									1							1	
1.7																1	
1.6				1				2			1					4	
1.5			2	5		1	1		1							10	
1.4		2	1	1	5	4	3	4		1						21	
1.3	1	1	1	7	7	9	7	6	4							43	
1.2	3	8	7	14	31	39	17	15	9	2						145	
0.8																	
0.7			2		1	2	2	2	1							10	
0.6																	
SUM	4	11	13	28	44	55	30	30	17	3	1					236	
TIME	150.1	38.7	36.5	62.9	94.8	114.2	72.5	89.0	51.1	18.1	0.2	0.1	0.2	0.	0.	728.3	

TABLE LXI - Continued

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE										2000, MISSION SEGMENT ASCENT					
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.4																
1.3			1	2	1				1							5
1.2		1	3	1	8	8	5	3	4							33
0.8																
0.7					1	1		1								6
0.6																
SUM		1	7	3	10	9	5	4	5							44
TIME	32.4	18.9	18.2	37.2	55.1	80.4	80.1	37.8	11.5	0.3	0.	0.	0.	0.	0.	372.4

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE										2000, MISSION SEGMENT MANUVR						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
2.4										1						1	
2.2											1					1	
2.0				1					3	1			1			6	
1.8					1		2	4	2	1	1					11	
1.7						1	1	1	3	1	1		1			9	
1.6		1		3		2	1	3	3	3	1		1			18	
1.5		3	2	3	5	7	3	5	4	1	2	2				37	
1.4		2	6	11	13	14	13	10	10	3	3		1			86	
1.3		5	7	12	27	36	31	24	11	13	3	1				170	
1.2		21	22	31	67	85	82	56	27	7		1				399	
0.8																	
0.7	5	5	6	5	8	7	8	4	4		1					53	
0.6			1	1	3	2	3	1								11	
0.5	1		1	1	1			1								5	
0.4							1									1	
0.2																	
SUM	6	37	45	68	125	154	145	109	67	31	13	4	4			808	
TIME	15.1	74.7	91.0	113.6	172.4	224.1	187.9	138.5	64.1	21.1	8.1	1.9	1.3	0.	0.	1103.9	

	MANUEVER NZ PEAKS FOR VELOCITY VS					NZ BY WEIGHT		9000,	ALTITUDE		2000, MISSION SEGMENT DESCNT					
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.8																
1.7								1								1
1.6																
1.5						1										1
1.4																
1.3				2	1	2										5
1.2		2	2	1	3	1		2		1		1				13
0.8																
0.7			1	1		2	1				1					6
0.6																
SUM		2	3	4	4	6	1	3		1	1	1				26
TIME	4.6	7.1	10.2	10.5	14.1	18.0	17.6	14.7	10.3	2.3	1.4	0.2	0.	0.	0.	115.1

	MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE										2000, MISSION SEGMENT STEADY						
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM	
1.4																	
1.3				2	2	1										5	
1.2				4	6	17	11	10	8	1						57	
0.8																	
0.7								2								2	
0.6																	
SUM				6	8	18	11	12	8	1						64	
TIME	64.0	34.6	67.2	87.6	199.7	319.9	245.7	154.0	140.3	24.0	0.3	0.	0.	0.	0.	1342.4	

TABLE LXI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 2000															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4									1						1
2.2										1					1
2.0			1					3	1			1			6
1.8				1		2	4	2	1	1					11
1.7					1	1	2	3	1	1		1			10
1.6		1		3		2	1	3	3	3	1		1		18
1.5		3	2	3	5	8	3	5	4	1	2				38
1.4		2	6	11	13	14	13	10	3	3	2	1			86
1.3		5	8	18	31	39	31	24	12	13	3	1			185
1.2		24	27	37	84	111	98	71	39	9		2			502
0.8															
0.7	5	5	10	6	9	10	9	7	4		2				67
0.6			1	1	3	2	3	1							11
0.5	1		1	1	1			1							5
0.4						1									1
0.2															
SUM	6	40	55	81	147	187	162	128	80	33	14	5	4		942
TIME	117.7	139.3	176.6	249.0	445.3	642.4	531.3	344.9	226.3	47.8	9.8	2.0	1.3	0.	2933.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT ASCENT															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
1.3					1										1
1.2															
0.8															
SUM					1										1
TIME	0.5	2.0	2.0	3.0	1.8	1.6	1.3	0.	0.	0.	0.	0.	0.	0.	12.1

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT MANUVR															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4															
2.2							2				1				3
2.0			1					1	2						4
1.8								2		2					4
1.7											2				2
1.6						1		2							3
1.5															2
1.4							2								2
1.3				2	2	5		3							12
1.2			1	1	2	4	4	1							13
0.8															
0.7			4	1	5										10
0.6			1			1									2
0.5			2			2	2								6
0.4		1					2								3
0.2	1														1
LESS															
SUM	1	1	8	5	9	8	13	7	8	2	2	1			65
TIME	1.9	7.7	5.9	4.3	4.1	10.4	10.0	8.5	6.4	2.1	0.2	0.4	0.	0.	61.8

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000, MISSION SEGMENT STEADY															
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
0.8															
0.7						2									2
0.6															
SUM						2									2
TIME	0.	0.	0.	0.	1.1	10.6	19.3	3.7	0.	0.	0.	0.	0.	0.	34.7

TABLE LXI - Continued

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000, ALTITUDE 5000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4																
2.2								2				1				3
2.0				1					1	2						4
1.8									2		2					4
1.7								2								2
1.6																
1.5						1			2							3
1.4								2								2
1.3				2	2		5		3							12
1.2			1	1	3	4	4	1								14
0.8																
0.7			4	1	5		2									12
0.6			1			1										2
0.5			2			2	2									6
0.4		1					2									3
0.2	1															1
LESS																
SUM	1	1	8	5	10	8	15	7	9	2	2	1				68
TIME	2.4	9.7	7.8	7.3	6.9	22.5	30.6	12.3	6.4	2.1	0.2	0.4	0.	0.	0.	108.6

MANEUVER NZ PEAKS FOR VELOCITY VS NZ BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4										1						1
2.2								2			1	1				4
2.0				2				1	4	3				1		11
1.8					1		2	4	5	1	3					16
1.7						1	1	4	4	1	1			1		13
1.6		1		4		2	1	5	3	3	2			1		22
1.5		3	4	8	5	10	4	5	7	1	2	2				51
1.4		4	7	12	18	18	16	16	10	4	3			1		109
1.3	1	6	9	27	40	48	44	31	19	13	3	1				242
1.2	3	32	35	52	118	154	122	89	48	11		2				666
0.8																
0.7	5	5	16	7	15	12	13	9	5		2					89
0.6			2	1	3	3	3	1								13
0.5	1		3	1	1	2	2	1								11
0.4		1					3									4
0.2	1															1
LESS																
SUM	11	52	76	114	201	250	211	168	105	38	17	6	4			1253
TIME	275.4	188.5	221.1	319.4	547.9	779.7	637.4	448.4	284.7	71.8	10.2	2.4	1.5	0.	0.	3788.5

MANEUVER NZ PEAKS FOR VELOCITY VS NZ																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
2.4						1	1	4		2						2
2.2						3	1	5			3	2				11
2.0				3	4	5	8	17	27	16	10	5	1	1		27
1.8		4	4	3	7	9	17	27	16	10	5	1	1			103
1.7		2	5	6	18	10	11	15	16	14	12	4	2			115
1.6		2	5	17	21	23	21	25	13	19	8	1	2	1		158
1.5		7	17	30	49	49	39	33	41	16	7	3	1		1	293
1.4	3	28	26	54	82	98	80	79	45	18	4	1	2			522
1.3	9	47	59	106	175	257	199	144	76	25	14	5	1	1		1118
1.2	26	123	123	219	501	673	563	370	164	54	8	17	2	1		2839
0.8																
0.7	10	32	36	27	60	39	48	49	28	9	4					342
0.6	5	6	9	7	12	13	14	9	1	1					1	78
0.5	3		5	4	3	3	7	3	1	1						30
0.4		2	2		1	2	7									14
0.2	1	2			1	1	1									6
LESS																
SUM	57	255	293	476	934	1177	1000	753	412	179	70	34	12	4	2	5658
TIME	830.4	583.0	656.4	1116.3	1896.8	2512.0	2140.7	1488.6	939.3	268.9	39.9	10.7	4.0	0.9	0.612388	4

TABLE LXII. n_x PEAKS FOR AIRSPEED VERSUS n_x
BY WEIGHT, SAMPLE II

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25														1		1
-0.20											1	1				1
-0.15									1	3						6
-0.10											1	1				
0.10	1			3	4	2										10
0.15																2
0.20																
SUM	1			3	6	2			1	3	2	1		1		20
WINS	32.2	15.8	14.8	34.8	64.1	75.4	83.6	54.1	64.9	37.7	4.1	0.7	0.1	0.1	0.	482.2

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 8000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25												1	1		1	3
-0.20								1	1	3	5	4	5			19
-0.15			1	1	4	1	4	9	15	24	21	3	5		2	90
-0.10																
0.10	18	6	3	5	2		1									35
0.15	2															2
0.20	1															1
0.25																
SUM	21	6	4	6	6	1	6	9	16	27	26	8	11		3	150
WINS	522.8	378.7	42.5	762.0	1284.8	1656.8	1419.2	986.1	499.7	159.4	25.6	7.5	2.5	0.9	0.6	8117.7

NX PEAKS FOR AIRSPEED VS NX BY WEIGHT 9000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25										1		1	1			3
-0.20								2				1				3
-0.15				1				1	6	4	9	6	5			32
-0.10																
0.10	7	1		1	1	1										11
0.15																
SUM	7	1		2	1	1		3	6	5	9	8	6			49
WINS	275.4	188.5	221.1	319.4	547.9	779.7	637.4	448.4	284.7	71.8	10.2	2.4	1.5	0.	0.	3788.5

TABLE LXIII. n_x PEAKS FOR AIRSPEED VERSUS n_x
BY ALTITUDE, SAMPLE II

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 1000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.20																
-0.15									1	1						2
-0.10																
0.10	11	4	2	1	1	1										20
0.15																
SUM	11	4	2	1	1	1			1	1						22
WINS	415.2	185.9	143.4	197.4	295.5	361.7	192.7	150.6	92.1	40.9	2.5	0.1	0.2	0.	0.	2084.1

NX PEAKS FOR AIRSPEED VS NX BY ALTITUDE 2000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25										1		1	2	1	1	6
-0.20								1	1	3	6	5	4			20
-0.15			1	1	4	1	4	10	18	29	31	6	10		2	117
-0.10																
0.10	14	3	1	7	5	2	1									34
0.15	2				2											4
0.20	1															1
0.25																
SUM	17	3	2	8	12	3	6	10	19	33	37	12	16	1	3	182
WINS	390.0	375.2	493.6	890.2	1545.7	2093.1	1873.3	1300.0	718.4	208.1	35.2	9.9	3.6	0.7	0.6	9926.6

TABLE LXIII - Continued

NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE 5000											
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM		
-0.30																	
-0.25											1				1		
-0.20							2					1			3		
-0.15				1				3	1		4				9		
-0.10																	
-0.05				1											2		
0.00																	
0.05																	
0.10																	
0.15							2	3	1		5	1			15		
SUM	1		2				2	3	1		5	1			15		
WINS	5.4	18.4	17.0	27.6	50.5	55.9	64.6	33.4	19.7	14.7	2.0	0.7	0.2	0.2	0.	323.1	

NX PEAKS FOR		AIRSPEED VS		NX BY		ALTITUDE SUM											
LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM		
-0.30																	
-0.25									1		2	2		1	7		
-0.20						1	2	1	3	6	5	5			23		
-0.15			1	2	4	1	4	10	22	31	31	10	10	2	128		
-0.10																	
-0.05																	
0.00																	
0.05																	
0.10																	
0.15																	
0.20																	
0.25																	
SUM	29	7	4	11	13	4	6	12	23	35	37	17	17	1	3	219	
WINS	13.0	50.0	55.4	111.3	159.9	751.9	214.7	1-39.6	539.3	268.9	37.9	10.7	4.0	0.9	0.	6.612388.3	

TABLE LXIV. n_x PEAKS FOR CYCLIC DEFLECTION VERSUS n_x BY MISSION SEGMENT, SAMPLE II

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. ASCENT

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.10										
0.10				3	1					4
0.15	1									1
0.20										
SUM	1			3	1					5

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. MANUVR

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										
-0.25	1	4	2							7
-0.20	2	9	9	3						23
-0.15		40	55	15	13				1	124
-0.10										
0.10	3	1	4	21	17				1	47
0.15			1		2					3
0.20										
SUM	6	54	71	39	32				2	204

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. DESCNT

	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.20										
-0.15		1	3							4
-0.10										
0.10				2						2
0.15										
0.20		1								1
0.25										
SUM		2	3	2						7

TABLE LXIV - Continued

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.10										
0.10				1	2					3
0.15										
SUM				1	2					3

NX PEAKS FOR CYCLIC DFLECTN VS NX BY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										
-0.25	1	4	2							7
-0.20	2	9	9	3						23
-0.15		41	58	15	13				1	128
-0.10										
0.10	3	1	4	27	20				1	56
0.15	1		1		2					4
0.20		1								1
0.25										
SUM	7	56	74	45	35				2	219

TABLE LXV. n_y PEAKS FOR AIRSPEED VERSUS n_y BY WEIGHT, SAMPLE II

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 7000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.25																
-0.20							1	1								2
-0.15	1	2	1	2	2	4	7	3	12	7						41
-0.10																
0.10	2	1		1	5	4	6	3	20	20	2					67
0.15							2		3	1						7
0.20																
0.25							1		1							2
0.30																
0.35								1								1
0.40																
SUM	3	3	1	3	9	8	15	8	36	28	2					120
MIN	3.02	45.8	14.9	34.8	64.1	75.4	93.6	54.1	64.9	37.7	4.1	0.7	0.1	0.1	0.	482.2

NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 8000																
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
LESS																
-0.40	1															1
-0.35																
-0.30		1						1								2
-0.25			1	1	5	3	1	2	1							15
-0.20			3	5	10	11	18	10	4	2						67
-0.15	35	23	21	42	58	87	115	103	61	15	15	5	1			585
-0.10																
0.10		13	16	23	86	119	123	108	76	36	13	5	1		1	628
0.15	1	2	4	3	8	8	10	12	12	10	3	1			2	76
0.20			2	2	2	2	3	4	3	3		1	2			26
0.25							1	1			3					5
0.30										1						1
0.35																
SUM	52	39	47	76	169	230	275	241	157	67	34	12	4		3	1406
MIN	524.8	378.7	420.5	762.0	1284.8	1656.8	1419.8	986.1	489.7	159.4	25.6	7.5	2.5	0.9	0.6	8117.7

TABLE LXV - Continued

	NY PEAKS FOR AIRSPEED VS NY BY WEIGHT 9000															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.30																
-0.25				1		2	1	1								5
-0.20		4	1	1	2	2	0	4	5	3	1	1				32
-0.15		24	4	11	9	23	38	37	41	23	4	1	1			212
-0.10																
0.10		1	1	2	8	14	24	34	20	16	2	1	3			126
0.15			2		1		4	8	4	2		1				22
0.20								3								3
0.25																
SUM	24	8	14	21	39	76	80	74	44	7	3	5				400
MIN	275.4	188.5	221.1	319.4	547.9	779.7	837.4	648.4	284.7	71.4	10.2	2.4	1.5	0.	0.	3788.5

TABLE LXVI. n_y PEAKS FOR AIRSPEED VERSUS n_y BY ALTITUDE, SAMPLE II

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE LESS															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.10																
0.10		1							2							3
0.15																
SUM	1								2							3
MIN	20.8	3.5	4.4	1.1	2.1	1.3	4.0	4.8	9.1	5.3	0.2	0.	0.	0.	0.	54.4

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 1000															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.40		1														1
-0.35																
-0.30																
-0.25		1			1	2										4
-0.20		6	1		5	5	1	5	1	1						25
-0.15		40	12	9	11	27	27	23	20	11	1					182
-0.10																
0.10		2	7	8	5	21	18	25	19	3						108
0.15			2	3	1	3	3	2	6							20
0.20		1		2			1	2		1						9
0.25																
SUM	51	21	23	17	59	55	52	52	15	3	1					349
MIN	615.2	185.9	143.4	197.4	295.5	361.7	194.7	150.6	92.1	40.9	2.5	0.1	0.2	0.	0.	2084.1

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 2000															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.35																
-0.30		1						1								2
-0.25			1	2	4	3	2	3	1							16
-0.20		2	1	3	7	7	14	22	11	6						76
-0.15		20	14	24	41	54	101	131	123	84	23	15	6	1		638
-0.10																
0.10		7	8	10	26	85	127	138	112	104	57	16	6	1	1	698
0.15			2	1	3	5	8	18	10	17	10	4	1		2	81
0.20		1			2		2	5	3	2		1	2			20
0.25							2	1	1		3					7
0.30										1						1
0.35																
0.40																
SUM	33	26	39	81	156	255	315	267	216	95	38	15	4		3	1940
MIN	366.0	375.2	493.6	890.2	1548.7	2885.1	1873.3	1300.0	718.4	208.1	35.2	9.9	3.6	0.7	0.6	9926.6

	NY PEAKS FOR AIRSPEED VS NY BY ALTITUDE 5000															
	LESS	40	60	70	80	90	100	110	120	130	140	150	160	170	180	SUM
-0.20																
-0.15		3		1	1	1	5	4	1	2						18
-0.10																
0.10		1		1		2	2		3	1		2				12
0.15		1			1	1			1							4
0.20																
SUM	2	3		2	2	4	7	4	4	4		2				34
MIN	4.4	18.4	17.0	27.6	50.4	65.9	64.6	33.4	19.7	14.7	2.0	0.7	0.2	0.2	0.	323.1

TABLE LXVI - Continued

NY PEAKS FOR		AIRSPEED VS		NY BY		ALTITUDE		SUM													
LESS	40	60	70	8	90	100	110	120	130	140	150	160	170	180	190	SUM					
LESS																					
-0.40	1																				1
-0.35																					
-0.30		1					1														2
-0.25	1		1	2	5	5	2	3	1												20
-0.20	8	1	4	7	12	19	23	16	7	3		1									101
-0.15	60	29	33	53	83	129	155	147	95	26	16	6	1								838
-0.10																					
0.10	11	15	18	32	106	147	165	131	112	58	16	8		1							821
0.15	1	4	4	4	9	12	20	16	17	11	4	1			2						105
0.20	2		2	2	2	2	3	7	3	3		1		2							29
0.25							2	1	1		3										7
0.30										1											1
0.35																					
0.40								1													1
SUM	84	50	62	100	217	314	374	323	237	102	39	17	4		3						1926
MEANS	330.4	503.0	650.4	1116.3	1895.8	2511.9	2141.7	1488.6	839.3	269.9	39.9	10.7	4.0	0.9	C.612388.3						

TABLE LXVII. n_y PEAKS FOR CYCLIC DEFLECTION VERSUS n_y BY MISSION SEGMENT, SAMPLE II

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. ASCENT										
LESS	-40	-30	-20	-10	10	20	30	40	SUM	
-0.30										
-0.25				1						1
-0.20			1	2	2					5
-0.15	2	9	29	26	11					77
-0.10										
0.10	1	1	20	18	1					41
0.15			2	3						5
0.20			1							1
0.25										
SUM	3	10	53	50	14					130

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. MANUVR										
LESS	-40	-30	-20	-10	10	20	30	40	SUM	
-0.35										
-0.30					2					2
-0.25	1	1	5	5	5					17
-0.20		7	30	33	12	2				84
-0.15	5	32	227	202	49	1				516
-0.10										
0.10	5	45	223	221	36	3		1		534
0.15	2	7	36	32	9					86
0.20	1		15	6	3					25
0.25			3	3	1					7
0.30			1							1
0.35										
0.40				1						1
SUM	14	92	540	503	117	6		1		1273

TABLE LXVII - Continued

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. DESCNT										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
-0.30										
-0.25					1					1
-0.20		1		1	1					3
-0.15		3	20	24	14	1				62
-0.10										
0.10	1	5	42	39	9					96
0.15			3	3	2					9
0.20				1	1					2
0.25										
SUM	1	9	65	68	28	1				172

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. STEADY										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
LESS										
-0.40					1					1
-0.35										
-0.30										
-0.25				1						1
-0.20					9					9
-0.15				1	182					183
-0.10										
0.10					15					150
0.15					4					6
0.20					1					1
0.25										
SUM				2	349					351

NY PEAKS FOR CYCLIC DFLECTN VS NY BY MISS. SEG. SUM										
	LESS	-40	-30	-20	-10	10	20	30	40	SUM
LESS										
-0.40					1					1
-0.35										
-0.30					2					2
-0.25	1	1	5	7	6					20
-0.20		3	31	36	24	2				101
-0.15	7	44	276	253	256	2				838
-0.10										
0.10	7	51	285	278	196	3			1	821
0.15	2	7	41	38	17					105
0.20	1		16	7	5					29
0.25			3	3	1					7
0.30			1							1
0.35										
0.40				1						1
SUM	18	111	658	623	508	7			1	1926

TABLE LXVIII. n_x PEAKS FOR n_x VERSUS n_z , SAMPLE II

	NX PEAKS FOR NX VS NZ															
	LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4					1	2										3
2.2							2									2
2.0					2		9									11
1.8					2	6	16		1							25
1.7						4	14		1							19
1.6					1	3	12		1							23
1.5						2	6		2	2						12
1.4						2	15		9							26
1.3						1	14		2							17
1.2					1	2	18		5							26
0.8						1	16		30	2	1					50
0.7									3							3
0.6									2							2
0.5																
SUM					7	23	128		56	4	1					219

TABLE LXIX. n_x PEAKS FOR n_y VERSUS n_x , SAMPLE II

NX PEAKS FOR NY VS NX															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
-0.30							7								7
-0.25							21								23
-0.20							112	2							120
-0.15				1		4		6	1	3	1				
-0.10															
0.10				1			55								56
0.15							5								4
0.20							1								1
0.25															
SUM				2		4	200	8	1	3	1				219

TABLE LXX. n_y PEAKS FOR n_x VERSUS n_y , SAMPLE II

	NY PEAKS FOR NX VS NY														
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
-0.40							1								1
-0.35															
-0.30							2								2
-0.25						1	18	1							20
-0.20						1	100								101
-0.15					2	7	824	5							830
-0.10															
0.10					3	13	801	3						1	821
0.15						4	101								105
0.20						2	26								29
0.25						2	5								7
0.30							1								1
0.35															
0.40							1								1
SUM					5	31	1880	9						1	1926

TABLE LXXI. n_y PEAKS FOR n_y VERSUS n_z , SAMPLE II

NY PEAKS FOR NY VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4						2									2
2.2						1									1
2.0						3		4			1				6
1.8				1		5		5	1		1			1	12
1.7					1	5		5	1		1				13
1.6						5		9	3	1					22
1.5			1	2	2	11		9	2		2	1			30
1.4					2	17		19	3	2	1				44
1.3					11	17		31	8	3	1				71
1.2				1	8	45		47	9	3					113
0.8	1		1	16	76	718		685	74	20					1591
0.7						8		5	2						15
0.6						1		1	1						3
0.5						1		1	1						3
0.4															
0.2								1							1
LESS															
SUM	1		2	20	101	838		821	105	29	7	1		1	1926

TABLE LXXII. n_z PEAKS FOR n_x VERSUS n_z , SAMPLE II

NZ MANEUVER PEAKS FOR NX VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4				1			1								2
2.2						3	5								11
2.0				1		4	22								27
1.8				1	5	17	79	1							103
1.7					3	10	102								115
1.6					1	8	149								158
1.5					1	5	287								293
1.4						3	515	4							522
1.3					1	4	1113								1118
1.2					1	7	2826	5							2839
0.8															
0.7							342								342
0.6						1	76	1							78
0.5						1	29								30
0.4							14								14
0.2							6								6
LESS															
SUM				3	15	65	5564	11							5658

TABLE LXXIII. n_z PEAKS FOR n_y VERSUS n_z , SAMPLE II

NZ MANEUVER PEAKS FOR NY VS NZ															
LESS	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15	-0.10	0.10	0.15	0.20	0.25	0.30	0.35	0.40	SUM
2.4							2								2
2.2							9				1				11
2.0							25	1		1					27
1.8				1		1	88	9	1	1	2			1	103
1.7				1		1	104	6	2	1					115
1.6						4	150	4							158
1.5				1	1	5	274	7	2	1	2				293
1.4						8	498	9	4	2		1			522
1.3					1	5	1097	8	1	1	1				1118
1.2						20	2782	32	2	3					2839
0.8															
0.7					1	2	334	4	1						342
0.6					1	1	73	1	2						78
0.5					1	1	26	2							30
0.4							14								14
0.2							6								6
LESS															
SUM				3	5	53	5482	83	15	9	6	1		1	5658

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13. ABSTRACT From a structural flight loads program on three AH-1G helicopters, 408.2 hours of valid multichannel flight data were recorded as the helicopters operated from bases in Southeast Asia. Data were processed and analyzed according to four distinct flight phases, termed mission segments: (1) takeoff and ascent; (2) maneuver; (3) descent, flare, and landing; and (4) steady state. Data are presented in the form of time and occurrence tables, histograms, and exceedance curves. These data indicate the time spent in the mission segments and parameter ranges; the number of peak param- eter values occurring in the ranges of the given parameter, during each of the mis- sion segments, and in the ranges of one or more related parameters; and the time to reach or exceed given maneuver and gust normal load factors. The data are pre- sented in two samples of 201.7 hours and 206.5 hours. These samples, identified as Sample I and Sample II respectively, were obtained consecutively. Sample I was recorded between August 1968 and April 1969, and Sample II was recorded between April 1969 and November 1969. This separate presentation is made to permit an evaluation of the validity of the 200-hour sample as an adequate data base. The dif- ferences between the two samples were minor, and the two samples were observed to be similar in their distributions of flight data.		

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